PROPOSED FRAME WORK FOR MONITORING EQUITY IN ACCESS AND HEALTH SYSTEMS ISSUES IN ANTIRETROVIRAL THERAPY (ART) PROGRAMMES IN SOUTHERN AFRICA

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Executive Summary

Universal provision of antiretroviral therapy (ART), while feasible, is expensive. In light of this limitation, the World Health Organisation (WHO) has launched the 3 x 5 initiative, to provide ART to 3 million people by the end of the year 2005 (WHO, 2003). In Southern Africa large-scale provision of ART will likely be achieved through fragile public health systems. ART programmes should therefore be developed and expanded in ways that will not aggravate inequities or result in the inappropriate withdrawal of resources from other health interventions or from other parts of the health system (McCoy, 2003).

The SADC Summit in 2003 noted the devastating effects of HIV and AIDS as well as tuberculosis, malaria and other infectious diseases on the population of the region. In particular, the Summit expressed concern that the HIV and AIDS pandemic in the Southern African region continues to be a major threat to the developmental gains attained so far. A Summit on HIV and AIDS in Maseru, Lesotho in July 2003 resolved to establish a regional fund for the implementation of the SADC HIV and AIDS Strategic Framework and Programme of Action 2003-2007 and adopted and signed the Maseru Declaration on the Fight against HIV and AIDS in the SADC Region, which identifies a number of priority areas including access to care, testing and treatment; prevention and social mobilisation; resource mobilisation; development oriented approach; and monitoring and evaluation. The Maseru declaration specifically notes that the response to HIV and AIDS in the region shall be through strengthened health systems.

In line with this, EQUINET implemented work in 2003 with Oxfam/GB, DFID and IDRC to inform policy debates around health sector responses to HIV and AIDS in the region, particularly with respect to care and treatment access. This programme explored the equity dimensions of the policy choices that are being made within health policy around health services, treatment access and resources for health care. The programme commissioned and produced country research papers (from Zimbabwe, Malawi and South Africa) and a southern African regional paper and further papers on AIDS and health personnel and on nutrition and food security. A regional meeting was hosted by EQUINET/Oxfam working in co-operation with SADC HIV and AIDS programme in February 2004 to provide more substantive presentation of the papers and to discuss the follow up work and policy interventions arising from the work. This meeting developed principles for equity and health systems strengthening approaches in treatment access (EQUINET/TARSC 2004). These principles covered areas of

- Fair, transparent processes to make informed choices
- Joint public health and HIV and AIDS planning
- Integrating treatment into wider health systems
- Realistic targets for treatment access with clear guidelines and monitoring systems for ensuring equity in access and quality of care.
- Treatment resources integrated into regular budgets, supported by long term external commitments and through fair financing approaches
- Prioritise human resource development in the health sector
- Strengthen essential drugs policies and systems at national and regional level.

SADC in July 2004 held consultations with national authorities on AIDS and other partners to develop its business plan for the implementation of its strategic plan on HIV and AIDS. The business plan highlights the need for sharing of good practice, monitoring, resource mobilization and capacity support to ensure strengthened and equitable health systems approaches to treatment roll out.

Malawi is one of the countries that have severely been affected by the human immunodeficiency virus (HIV and AIDS) pandemic. HIV and AIDS prevalence is estimated at 14.1% (NAC, 2003) in the 15-49 age group. HIV prevalence is higher in urban than rural areas at 25% versus 13% (NAC, 2003) in the same age group. It is also noteworthy that in the young age group of 15-24, the prevalence among females is four to six times higher than amongst males (NAC, 1999). Since the advent of ART, Malawi, like other countries in sub-Saharan Africa has added ART to the national response to HIV and AIDS and has been pledged a total budget of $284 million from the Global Fund to fight AIDS, malaria and tuberculosis (GFATM) for its national response to the HIV and AIDS epidemic. A substantial component of this budget will be used to support the nation-wide scale-up of ART using a public health approach. It is estimated that these funds are sufficient for only 50,000 people for a period of five years, while it is estimated that 150,000 to 170,000 are eligible for ART. Malawi currently has no system in place to monitor equity in access to anti-retroviral therapy or to track the impact of provision of ART on the health system.

This paper, commissioned by EQUINET, proposes a draft framework for monitoring equity in access and health systems issues in ART programmes in Southern Africa, with Malawi as a case study. It proposes that an equity monitoring system would comprise seven theme areas:

i. Fair policy development, monitoring and accountability through fair process
ii. Equitable access to ART with realistic targets
iii. Fair and sustainable financing and accountable financial management
iv. ART programme integration into the delivery of the essential health package
v. Prioritised human resource development to deliver the essential health package
vi. Sustainable & accountable purchase, distribution and monitoring of drugs and commodities for ART and the essential health package
vii. Ensuring private sector provision of ART is complementary to and enhances public health system capacity

These theme areas encompass a national monitoring 'system' which extends beyond one agency or single data collection method. It is intended to be holistic, recognising that some monitoring aspects will be conducted separately by partner organisations in order that together, the contributions of different organisations comprise the national-level monitoring system. It is also important to recognise that not all aspects of the monitoring could be conducted on an annual basis.

To ensure national and regional buy-in of the necessity to monitor equity in access and health systems issues in ART programmes, it is suggested that a regional M&E programme of work should be developed which should be used as an advocacy tool to champion monitoring programmes for equity in access and health systems issues in countries in the region and internationally.

This holistic framework for monitoring is in line with the proposals for the business plan from the July 2004 SADC meeting where it was noted that national and international preoccupations with targets in terms of numbers treated should not overshadow the health systems issues. The SADC NACs meeting proposed that together with monitoring of targets in terms of numbers treated, there also be monitoring of health systems impacts and issues in ART expansion, with reporting both nationally and to the SADC Integrated Council of Ministers.

LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
BIS	Budget Information Service
DFID	Department for International Development (UK)
DHS	Demographic and Health Survey
EHP	Essential Health Package
EQUINET	Regional Network on equity in health in southern Africa
GFATM	Global Fund to fight AIDS, Tuberculosis and Malaria
HMIS	Health Management and Information System
HIV	Human Immunodeficiency Virus
MAHEN	Malawi Health Equity Network
M&E	Monitoring and Evaluation
MOH	Ministry of Health
MTCT	Mother to Child Transmission
NAC	National AIDS Commission
NSF	National Strategic Framework
NSO	National Statistics Office
PLWA	People Living with HIV AND AIDS
P, M &E	Planning, Monitoring and Evaluation
SADC	Southern Africa Development Community
SES	Social Economic Status
SWAP	Sector Wide Approach
SWEF	System wide effects of the Fund Research network
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on HIV AND AIDS
UNGASS	Special United Nations General Assembly on HIV AND AIDS
USAID	United States Agency for International Development
WHO	World Health Organisation

1.0. Introduction

It is estimated that by the end of 2003, 38 million people (range 35 to 42 million) world-wide were infected with the human immunodeficiency virus (HIV) (UNAIDS, 2003). Developing regions of the world bear a disproportionate share of the epidemic, sub-Saharan Africa being the worst affected with 25 million people infected (UNAIDS, 2003)

Malawi is one of the countries that have been severely affected by the HIV and AIDS pandemic. HIV and AIDS prevalence is estimated at 14.1% (NAC, 2003). HIV prevalence is higher in urban than rural areas at 25% versus 13% (NAC, 2003). It is also noteworthy that in the young age group of 15-24, the prevalence among females is four to six times higher than amongst males (NAC, 1999). Since the advent of anti-retroviral therapy (ART), Malawi, like other countries in sub-Saharan Africa has added ART to the national response to HIV and AIDS.

Universal provision of ART, while feasible, is expensive. In light of this limitation, the World Health Organisation (WHO) has launched the 3 x 5 initiative, to provide ART to 3 million people by the end of the year 2005 (WHO, 2003). The 3 by 5 initiative is considered as a step towards universal access.

Malawi has been pledged a total budget of $284 million from the Global Fund to fight AIDS, malaria and tuberculosis (GFATM) for its national response to the HIV and AIDS epidemic (http://www.theglobalfund.org/en/funds_raised/reports/, accessed 22nd August, 2004). A substantial component of this budget will be used to support the nation-wide scale-up of ART using a public health approach. It is estimated that these funds are sufficient for only 50,000 people for a period of five years, while it is estimated that 150,000 to 170,000 are eligible for ART. In the next GFATM call for proposals, it is likely that Malawi will apply for an additional $100 million mainly to support ART provision to the additional number of Malawians eligible for ART.

In Southern Africa large-scale provision of ART will likely be achieved through fragile public health systems. Health systems are important vehicles for reducing poverty and for redistribution of wealth in highly unequal societies. These positive effects are reduced when health systems are inaccessible to low income communities, when they are underfunded or weak, particularly at the primary health care and district level (EQUINET, 2004). 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 more importantly, what impact provision of ART will have on 'equity' for the provision of essential health services (Kemp et al. 2003). ART programmes should therefore be developed and expanded in ways that will not aggravate inequities or result in the inappropriate withdrawal of resources from other health interventions or from other parts of the health system (McCoy, 2003).

It would also be important to note that the sustainability of ART expansion depends on the strengthening of health systems, particularly of the public sector services used by low-income communities. Various projects and vertical delivery systems have over time become vulnerable to funding irregularities and resource shifts.

The scenario of inadequate funds for provision of ART is prevalent in most countries in Southern Africa. It therefore raises equity and ethical issues in access, rationing, targeting and prescription of ART. As ART is rolled-out in the region, it is important to have a comprehensive framework for monitoring and evaluating (M&E) equity in access to ART and health systems issues.

EQUINET is carrying out work through institutions in southern Africa to support equity in ART expansion through strengthened health systems. In 2003, EQUINET carried out a joint programme to inform the policy debates that have grown around health sector responses to HIV and AIDS in the region, particularly with respect to care and treatment access. This programme explored the equity dimensions of the policy choices that are being made within health policy around health services, treatment access and resources for health care. The programme commissioned and produced country research papers (from Zimbabwe, Malawi and South Africa) and a SADC regional paper and further papers on health personnel, nutrition and food security.

To follow up on the work carried out, a regional meeting was hosted by EQUINET /Oxfam working with SADC in February 2004 to provide a more substantive presentation of the papers and to discuss the follow up work and policy interventions arising from the work. This meeting widened the consensus around and commitment to a health systems approach to treatment access. EQUINET (2004) has developed and proposed a set of principles for strengthening health systems for treatment access. These principles include:

- Fair, transparent processes to make informed choices
- Joint public health and HIV and AIDS planning
- Integrating treatment into wider health systems
- Realistic targets for treatment access with clear guidelines and monitoring systems for ensuring equity in access and quality of care.
- Treatment resources integrated into regular budgets, supported by long term external commitments and through fair financing approaches
- Prioritise human resource development in the health sector
- Strengthened essential drugs policies and systems at national and regional level.

The SADC Summit in 2003 noted the devastating effects of HIV and AIDS as well as tuberculosis, malaria and other infectious diseases on the population of the region. In particular, the Summit expressed concern that the HIV and AIDS pandemic in the Southern African region continues to be a major threat to the developmental gains attained so far. A Summit on HIV and AIDS in Maseru, Lesotho in July 2003 resolved to establish a regional fund for the implementation of the SADC HIV and AIDS Strategic Framework and Programme of Action 2003-2007 and adopted and signed the Maseru Declaration on the Fight against HIV and AIDS in the SADC Region, which identifies a number of priority areas including access to care, testing and treatment; prevention and social mobilisation; resource mobilisation; development oriented approach; and monitoring and evaluation. The Maseru declaration specifically notes that the response to HIV and AIDS in the region shall be through strengthened health systems.

SADC in July 2004 held consultations with national authorities on AIDS and other partners to develop its business plan for the implementation of its strategic plan on HIV and AIDS. The business plan highlights the need for sharing of good practice, monitoring, resource mobilization and capacity support to ensure strengthened and equitable health systems approaches to treatment roll out.

This paper, commissioned by EQUINET following on the last principle above, proposes a draft framework for monitoring equity in access and health systems issues in ART programmes in Southern Africa, with Malawi as a case study. This draft framework will be technically reviewed both nationally and within the region. The final agreed framework will inform policy and programming of health systems approaches to treatment access and to strengthen fair process in decision making at international, regional and global level on ART roll out.

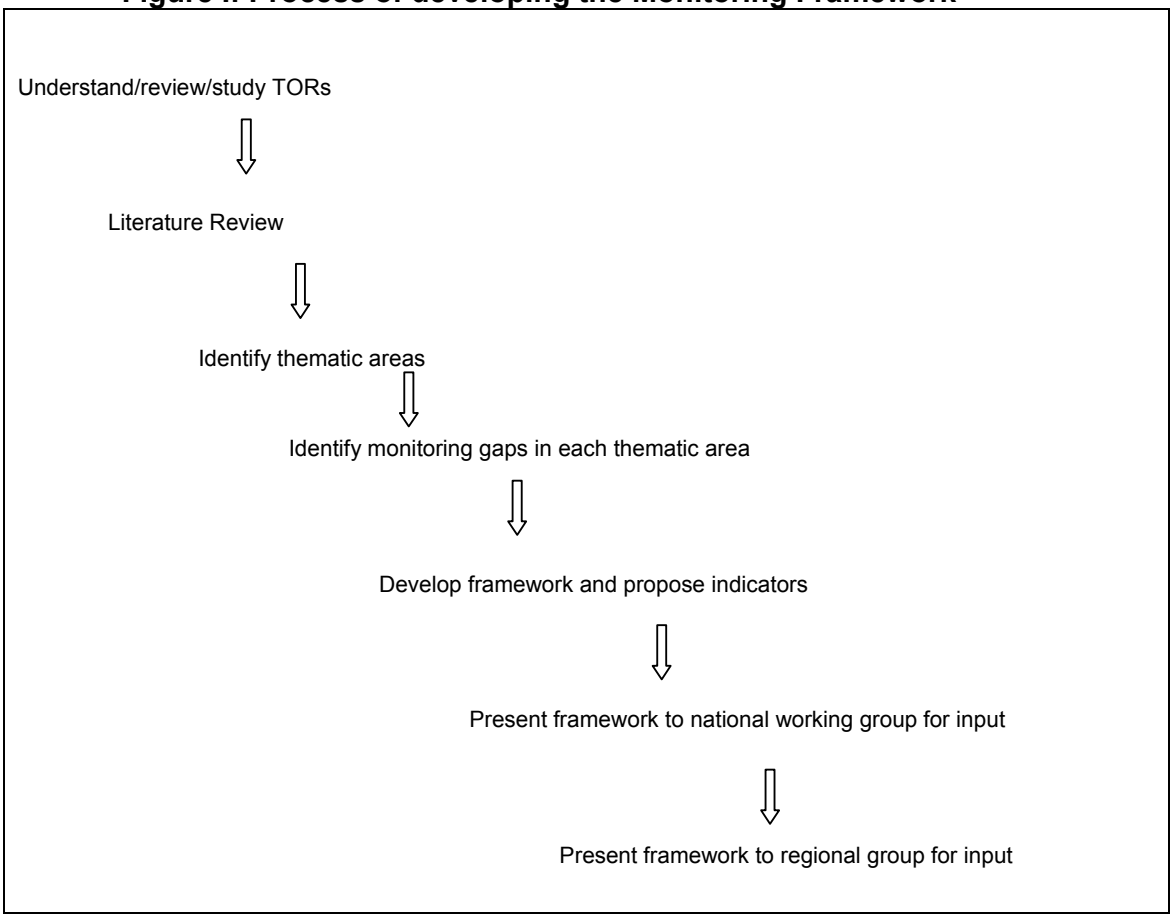
2.0 Objective

To propose a framework for a comprehensive national monitoring system for equity in access and health system support in ART programmes, and outline options for areas of regional analysis and for follow up research on priority health system issues not able to be addressed through monitoring. The specific objectives of this work are given in Appendix III.

3.0 Methodological approaches

A short desk review was conducted to identify literature which addresses equity in access to ART and health systems issues in ART. Themes on equity in access to ART and health systems strengthening were developed, from which, monitoring aspects of equity were identified. Several discussions were held in Malawi with key stakeholders in the Ministry of Health, National AIDS Commission and partner organisations who have been involved in looking at equity issues in ART. (see appendix IV). The draft framework resulting from this process will be technically reviewed and will be the subject of discussion in an EQUINET / Equi-TB regional meeting in Malawi in October 2004. Figure I summarises the process for developing the framework.

Figure I: Process of developing the Monitoring Framework



3.1 Report outline

This report is based on the TORs (Appendix III) for developing the framework. Sections 4 & 5 addresses TORs #1 & 2, section 6 addresses TORs #3 & 4. Sections 7, 8 and 9 addresses TORs # 5, 7 and 6 respectively.

4.0 Definitions and concepts of equity and health systems

4.1 Equity

The concept of equity in health implies addressing differences in health status that are judged to be unnecessary, avoidable and unfair. These differences relate to disparities across socio-economic status, gender, age, racial groups, rural/urban residence, and geographical region. Equity should therefore be achieved through the redistribution of the societal resources for health including the power to claim and the capabilities to use these resources (EQUINET steering committee, 2004). Because it requires a judgement, equity is an ethical and value based concept grounded in the principles of fairness and distributive justice (McCoy, 2003). From a health perspective, equity means the absence of unfair health disparities between different social groups like the poor/non-poor; men/women; rural/urban residents etc. In a situation of high levels of inequality, the priority is for vertical equity, or the different (and higher) allocation of resources to those with different (and greater) health needs (EQUINET steering committee, 2001)

4.2 Health systems

A health system has been defined as all activities whose primary purpose is to promote, restore or maintain health (SWEF, 2003).

EQUINET outlines key areas for health systems in the region, including

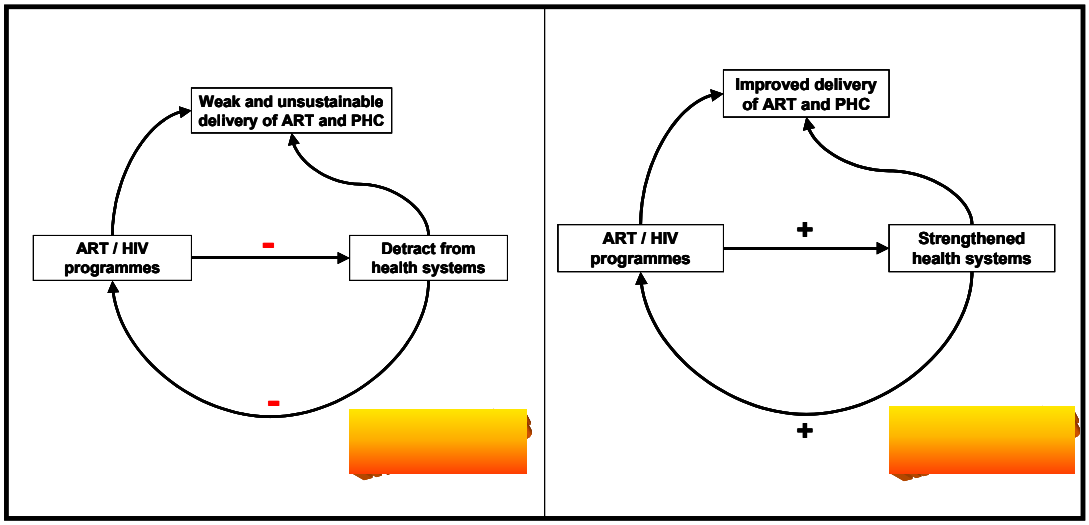
- public health, or the protection and promotion of population health and prevention of ill health
- the provision of relevant, quality health services and care for all according to need and financed according to ability to pay
- measures to build and secure the human resources and knowledge to shape and deliver public health and health services
- measures to protect and ensure the social values, ethics and rights that underlie health systems, including to participation and involvement and including protection of domestic regulatory policy flexibility from encroachments by international conditionalities (EQUINET 2004).

A health system encompasses national health policies and programs, laws and regulations, organisation and management structures, and financing arrangements, which in combination result in services, preventive, curative and public health services - aimed at improving health (SWEF, 2003). More specifically, a health system includes aspects of drug and commodities procurement policies; financing; human resources; information systems; logistics systems and the policy environment.

4.3 Equitable access, health systems and ART

Provision of ART in Malawi and other developing countries can potentially promote existing health systems or inadvertently lead to inequalities in the health systems. EQUINET (2004) observes that there is a potential for a virtuous cycle where programmes aimed at delivering ART strengthen health systems and thus widen access to ART and support the provision of essential health services. There is also a threat of a vicious circle of programmes aimed at delivering ART diverting scarce resources from wider health systems and undermining long-term access both to ART and to other critical public health interventions. Figure II shows the virtuous and vicious cycles.

Figure II: Relationship of provision of ART to health systems.



Source: Equinet 2004b

4.4 The equitable access and health system strengthening approach to ART scale-up

Equitable access and health system strengthening approach to ART scale up are two sides of the same coin, and imply scaling up ART using a public health approach. The approach aims to provide universal access to quality care and treatment, within a comprehensive response to HIV and AIDS, but in a manner which strengthens fragile public sector health services. The approach also acknowledges that there needs to be an urgent response to the provision of ART, but that provision should be sustainable and for life.

There are a number of mechanisms through which this approach may be realised, such as:

- Co-ordinated HIV and AIDS, health and finance planning, through fair process and using existing structures.
- Negotiated use of existing national health budget channels and processes. This should be done even for funds specifically intended for particular projects. Within this approach the national HIV and AIDS response,

articulated in most National Strategic Frames works (NSF), should also include provision of ART.

- Explicit use of ART funds to strengthen health systems, from grant writing stage onwards.
- Strengthening essential drugs procurement systems, distribution and monitoring
- Regulation of complementary private sector partnerships and roles
- Avoidance of a "project approach" to implementing HIV and AIDS and ART programmes. Clear plans to strengthen district health systems
- Human resources plans for capacity building and replacement and retention incentives.
- An explicit policy on who (which population groups) shall access ART and the mechanisms in place to reach the poor and other disadvantaged groups. An example would be to provide targeted ART literacy to women, orphans, the elderly, adolescents, children and other such vulnerable groups.

EQUINET (2004) outlines these and wider issues in its principles and issues for strengthening health systems for treatment access. The guiding principles are intended to support fair country level processes to develop strategies based on the capabilities, resources and demands of national health systems (EQUINET / TARSC 2004).

5.0 Current monitoring and evaluation of ART

5.1 Definitions

Monitoring is the tracking of key elements of a programme/project performance on a regular basis. Evaluation is the episodic/periodic assessment of the change in targeted results that can be attributed to the programme/project intervention. Monitoring and evaluation can be done using routinely collected data, reports, sentinel surveillance or through in-depth studies.

Routine data is data routinely collected and reported e.g. summaries of patient registers in ART clinics.

Sentinel surveillance usually means a sample of selected sites collecting additional data (more than the routine dataset). Staff at these sites would be given additional training and support, and possibly additional data-collecting resources. The purpose of sentinel sites is both to collect additional data and to collect more reliable and accurate data on the assumption that routine data systems are usually of limited value. This data can be collected daily / on-going or over a period of time to collect a snapshot of detailed and in-depth data. Sentinel surveillance also include periodic surveys / assessments of services. This is usually done in selected sites using established sampling methods.

Periodic management reports include management information about the implementation of programmes. This is information derived from within the health care system.

Impact evaluation, done at agreed times in the project cycle, is essentially a programme review about how a programme is being managed and how its inputs and activities are contributing to results. Impact evaluation is usually done by an external consultant / researcher.

DHS and household surveys: Most countries in the region carry periodic household surveys and also Demographic and health surveys. If co-ordinated, these can be valuable sources of monitoring data. For DHS, countries would have to negotiate to add an equity or health systems module into the DHS questionnaires.

5.1 Current monitoring on equity in access and health system strengthening in Malawi and in Southern Africa

Malawi like other countries in southern Africa has developed monitoring and evaluation plans for the national response to HIV and AIDS (NAC 2003b, 2003c). Malawi's HIV and AIDS M&E plan is comprehensive and includes all traditional monitoring and evaluation areas of surveillance; epidemiological research; national leadership monitoring; national public sector and civil society financial management monitoring and public sector and civil society programme management monitoring (NAC, 2003b, 2003c). For ART, the NAC M&E plan has a monthly summary for:

- people living with AIDS (PLWA) currently on ART by age group
- number started ART for the first time in each month by age group
- number of PLWA who fail to adhere to ART by age group

Aside from an age breakdown, there is no further national-level analysis of equity in terms of *who* (which population groups) access ART. Similarly there are no current mechanisms to monitor the impact of ART scale-up on essential health services. Both of these issues have been identified as national research priorities by the multi-stakeholder ART research coordination group facilitated by the Ministry of Health (meeting 5th August 2004).

In Malawi there are a couple of initiatives currently underway to set up smaller scale monitoring of equity and ART through Equi-TB Knowledge Programme, in collaboration with other partners. Equi-TB may soon embark on a system-wide effects (SWEF) study to find the impact of the GFATM resources on the health system. In Malawi it is proposed that the impact of ART scale-up on the health system is the main focus of this research since most of the GFATM money will be used to scale-up ART. Similarly qualitative studies have been conducted, or are proposed, to assess equity in access and adherence to ART in collaboration with ART service providers (The Lighthouse and MSF-Luxembourg).

It is not known if national M&E Plans of other countries in the region capture data on equity and health systems. Shamu (2004) in an EQUINET commissioned paper has compiled a list of organisations and areas where there is monitoring on ART programmes in southern Africa at regional, national and subnational level. Some of the organisations captured in Shamu (2004) collect data which can be used at country and regional level to monitor equity. (See Table 2 in Shamu (2004)).

At global or regional level, the essential indicators of the 3 by 5 initiative (WHO, 2003d) do not specifically cover equity or health systems (See Table 1). A modification of the initiative's indicators which cover quality of life; treatment adherence; ART service delivery; prevention aspects of service delivery; quality of services and coverage could provide basic routine indicators of which population groups access ART if they are disaggregated by sex, social economic status (SES), poor/non-poor and rural/urban. It should be noted that the service delivery aspects of 3x5 monitoring relate solely to ART-delivery (i.e. facilities providing ART) and do not encompass wider health system impact of ART scale-up.

Table 1: Essential indicators of the 3 by 5 initiative

Area/Theme	Level	Indicator
Policies	Inputs	Existence of the national policy, guidelines and target for ART programmes
Capacity-building	Process	Number of health workers trained to deliver ART services according to national or international standards
Stocks	Process	% of ARV distribution nodes that report on inventory consumption, quality, losses and adjustments on a monthly basis
Coverage	Outputs	% of districts with at least one centre that provides ART services in-line with national standards
Quality of Services	Outputs	% of designated facilities providing ART in line with national standards
Prevention aspects of service delivery	Outputs	Total # of persons tested, by age, sex and proportion of tests that are positive
ARV service delivery	Outcome	Proportion of people with advanced HIV receiving ART, # of drug regimes distributed, ARV resistance containment
Treatment adherence	Impact	% of people remaining on treatment at 6,12, and 24 months
Quality of life	impact	% of adults on treatment who gain weight by at least 10% six months after initiation

Source: WHO (2003d)

Most countries in the region implementing the 3 by 5 initiative will have in their M&E systems, the indicators of the initiative in Table 1. Countries could modify some of these national indicators to report by sex, SES, poor/non-poor and rural/urban. Such reporting could provide a basis for monitoring equity in access on a regional basis.

The 3 by 5 initiative has also developed an operational agenda which covers six areas of activity (WHO, 2003b). These areas are:

1. To co-ordinate and help develop an appropriate operational research agenda relevant to the needs of ART programmes
2. To seek data on the impact of scaling up ART on prevention and at-risk behaviour; on mitigation; and on stigma and discrimination
3. To identify ways to define the externalities of ART scale-up on health systems performance
4. To identify ways to cost ART programmes and link costs to impact and effectiveness
5. To improve programme design and find better tools to reduce risk behaviour and drug resistance
6. To incorporate new knowledge rapidly back into ART programme policy and practice.

Research agenda items (3) and (4) could feed into the proposed equity monitoring for Malawi and the region. HIV and AIDS Programmes in the region should tap into the 3 by 5 operations research agenda, for finance and technical assistance to complement their own research programmes and particularly those aspects of the agenda which address equity as items (3) and (4) above.

The Monitoring and Evaluation operations manual for National AIDS Councils proposed by WHO and UNAIDS (UNAIDS, 2002) is silent on equity monitoring. This also applies to the Special United National General Assembly on HIV and AIDS (UNGASS) and Millennium Development Goals indicators. Since most countries in the region follow these international monitoring guides, it should be expected that most countries in the region have not yet embarked on equity monitoring. By end of 2005, it is envisaged that the Country Response Information System (CRIS) which is being led by UNAIDS will be functional. The CRIS system will be much more flexible and allow countries to collect various kinds of data. Through CRIS, countries in the region have a chance to collect data that will enable them to monitor equity in access to ART and impact of ART scale up on health systems.

6.0 Framework for monitoring equity in access and health systems issues in ART

In most countries in southern Africa, ART is being scaled-up with funding being provided by various international co-operating partners. Inspite of this scale-up, there are not enough resources to provide ART to all eligible persons. This then calls for policy objectives to achieve equity in access to ART. On the other hand, ART scale up has implications on the health systems. ART for example could be used to provide training to new health workers or it could lead to the best health workers moving from other service areas to ART provision which is well funded. There is also a need therefore to ensure that ART scale up does not negatively affect the health system. In Malawi, in terms of *policy* objectives, the monitoring system needs to allow an assessment of whether ART provision satisfies the National HIV and AIDS policy on access to treatment, namely GOM undertakes

- to progressively provide access to affordable, high quality ART and prophylaxis to prevent OIs, but only to individuals who have tested HIV-positive and are deemed in need of this drug
- to ensure that essential health care, treatment and support for HIV and AIDS and opportunistic infections is accessible to the poor, in accordance with the Essential Health Package and the PRSP.
- To ensure mechanisms and national guidelines are developed for the delivery of ART. These mechanisms and guidelines shall not hinder access by the poor and people in remote places.

ART provision also needs to supports the mission of the Ministry of Health, namely

- To stabilize and improve the health status of Malawians by improving access, quantity, cost-effectiveness and quality of the EHP and related services so as to alleviate the suffering caused by illness, and promoting good health, thereby contributing to poverty reduction

Equity in access to ART and impact of ART provision on health systems therefore needs strong monitoring and evaluation systems to track inputs and impact of ART scale-up on equity and health systems in line with national policies.

6.1 Levels of monitoring

In southern Africa, the epidemic is generalised in all countries. This means that M&E indicators should be collected at local, national and regional level, with possibilities of analysis at each level.

Local level

To measure equity in access and health systems issues, the M&E system should have local indicators of "who" is accessing ART and health system impacts of ART scale-up on the district health system. Ideally data analysis would be carried out at district level, and the data compiled nationally to show the national picture. In Malawi, use of data as a management tool at district level is currently limited, although this should change in coming years with greater decentralisation of government to District Assemblies.

National level

To measure impact of ART roll-out on health systems, the M&E system should have national indicators that inform health system policies organised at that level. At this level, indicators could inform whether provision of ART detracts from or supports the implementation of the general health service delivery and could provide evidence on distributional access to ART.

Regional level

The response to the HIV and AIDS pandemic, while feasible at national level, requires regional initiatives. For example interventions are required to deal with cross-border transport. The response to HIV and AIDS is also an expensive venture and costs could be reduced by initiating interventions at regional level, such as in the bulk purchase of drugs or shared markets for local production of drugs in the region. At the same time regional co-operation is needed to ensure that health systems are not weakened in any one country, or that personnel flow unfairly across sectors and countries, leading to weakening access and population movements to secure treatment. A monitoring system could be used to indicate the distribution of ART across countries and the relationship to country HIV and AIDS burdens, as well as provide a regional assessment of key health system concerns to better organise the resources for responses within the region. This could be done by aggregating country data to show a regional picture.

6.2 Principles of the monitoring and evaluation system

Simplicity and relevance: The proposed M&E system should be as simple as possible and be focused on agreed criteria for equity in access to ART and impact on health systems.

Use and analysis of existing data sources: For equity and health systems monitoring to be a success, it should as much as possible use existing data sources. Analysis of the existing data should be used to highlight the extent of delivery of key health system policy goals.

Minimise indicators collected: It is advisable to keep routine indicators to a minimum. This is important as the effort and expense required to collect the necessary data can be challenging for national M&E systems with limited staff, time and capacity (WHO, 2003c). The existing Malawi NAC M&E system has about 59 indicators, which is already difficult to report on.

Use all relevant data sources: For equity monitoring it is important to establish a monitoring system which includes partner organisations and synthesises evidence from many sources (e.g. PRSP monitoring).

This proposed framework encompasses a national monitoring 'system' which extends beyond one agency or single data collection method. It is intended to be holistic, recognising that some monitoring aspects will be conducted separately by partner organisations in order that together, the contributions of different organisations comprise the national-level monitoring system. It is also important to recognise that not all aspects of the monitoring could be conducted on an annual basis.

Link monitoring to regular reporting and review at all levels of data collection: As noted earlier, analysis and review of monitoring evidence should be done at subnational, national and regional level for commitment to data quality and reliable data collection to be sustained, and for the data to have relevance to supporting health systems planning and responses.

Seven major theme areas for monitoring equity and health systems are proposed. These are:

i. Fair policy development, monitoring and accountability through fair process
ii. Equitable access to ART with realistic targets
iii. Fair and sustainable financing and accountable financial management
iv. ART programme integration into the delivery of the essential health package
v. Prioritised human resource development to deliver the essential health package
vi. Sustainable & accountable purchase, distribution and monitoring of drugs and commodities for ART and the essential health package
vii. Ensuring private sector provision of ART is complementary to and enhances public health system capacity

A framework summary of each of these theme areas is presented in Appendix I. This outlines each thematic area, indicators, and possible data sources. A summary table of the proposed indicators and sources for each area is shown in the discussion below.

6.3 Thematic areas

The thematic areas proposed areas are, while addressing various policy issues, also address commonly occurring aspects in them. These are aspects of equity, accountability and transparency, sustainability and efficiency and social justice as all of which occur in all the thematic areas.

6.3.1 Policy development, monitoring and accountability through fair process

Equity and health systems policy issues

Development of policy of equity in access to ART should be fair and transparent. This can be done by developing ART policy through a transparent process that involves all stakeholders. Such a process should also allow for revisiting and revising the policy in view of new evidence and arguments. It must also have a mechanism to ensure that the process is publicly accountable, involves stakeholders and is revisable. This framework proposes that not only is policy development conducted through a transparent process, but the monitoring and evaluation processes also promote the principles of accountability and fair process.

Possible indicators

The possible indicators for this theme could be:

- ART policy developed through documented participatory process
- Decisions on policy changes documented at each stage
- Policy Published (output indicator)
- Annual 'equity picture' (annual report) published
- Consultation on 'equity picture' through documented participatory process
- Policy changes made and implemented (if necessary)

Current sources of data

In Malawi, the M&E system maintained by NAC has these indicators. Policy Project Malawi, which was the main technical support agency for Malawi's HIV and AIDS Policy development, is a further source. It is necessary for NAC and Policy Project to consciously organise these indicators so that they are reported annually.

Summary

THEMATIC AREA	**Indicators (process and outcome)**	**Possible Data Source**
1. FAIR POLICY DEVELOPMENT, MONITORING AND ACCOUNTABILITY THROUGH FAIR PROCESS		
Objective: To measure fair process in policy development		
Fair process in policy development	*Input/output* ART policy developed through documented participatory process Decisions on policy changes documented at each stage Annual 'equity picture' (annual report) published Consultation on 'equity picture' through documented participatory process Policy changes made and implemented (if necessary) *output* Policy published	NAC records – meeting reports and documents
Policy implementation: Treatment /Health system literacy	*output* # of media ART radio/television programs produced and number of hours aired # of and types of communication media on ART and distributed # of gender sensitive and targeted media ART radio/TV programs produced and number of hours aired	NAC/MOH activity reports NAC/MOH activity reports NAC/MOH activity report form

	proportion of clinics adhering to access to ART protocols *Outcome* % of people with accurate knowledge on the effect of ART (by age group, sex, SES, rural/urban) % of people who know where to access ART (by age group, sex, SES, rural/urban	MOH supervision reports Population survey Population survey
Accountability in annual monitoring cycle and feedback	*output* Annual report compiled and published Monitoring findings disseminated through participatory process Feedback and decisions on policy changes documented at each stage Report formally reviewed through NAC monitoring processes	National AIDS Commission report (with support from partner organisations)

Limitations

To properly understand this area, there is a need for further analysis on the power differentials in policy making. In a study in Malawi (MANET, 2003), it was reported that various policies are formulated concerning PLWAs without consultation. Mechanisms to include all groups of people, regardless of their status in society should be identified and be incorporated into the policy making process. Deeper research could be done to provide information on the extent to which social groups, particularly more vulnerable groups, are able to access and use policy processes to secure their interests.

6.3.2 Social analysis of access, rationing and access to treatment

Equity and health system policy issues

A major monitoring issue in equity in access to ART will be to analyse on "who" is accessing ART. The aim of monitoring which population groups are accessing ART is to ensure that vulnerable groups identified in the National Position on Equity in Access to ART (NAC 2004) are adequately represented in those who access services.

Possible indicators

Simple analysis of 'who' access ART can be done with routine data collection systems, like the ART register. Simple indicators and analysis for this would be:

- Sex ratio of people on ART (compared if possible to estimates of 'need' based on HIV prevalence data)
- Ratio of rural/urban people on ART by sex, age, SES, location etc (outcome indicator)
- Ratio of poor/non-poor; unemployed/employed people on ART (by geographic region[1]) (outcome indicator)
- % of districts with at least one centre providing ART (output indicator)
- Ratio of TB notifications (proxy of 'need') to ART uptake (outcome indicator)
- Criteria for supply of ART to districts/regions published (input indicator)

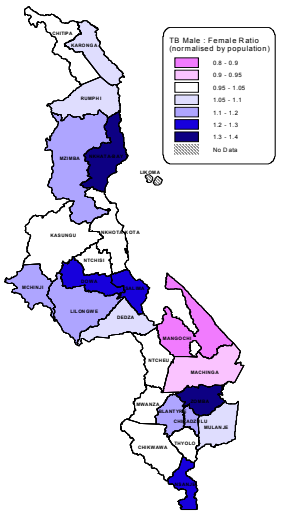
[1] In Malawi national data are available on poverty headcounts for geographic areas (to Traditional Authority Area Level) based on the Integrated Household Survey and the Census.

Summary

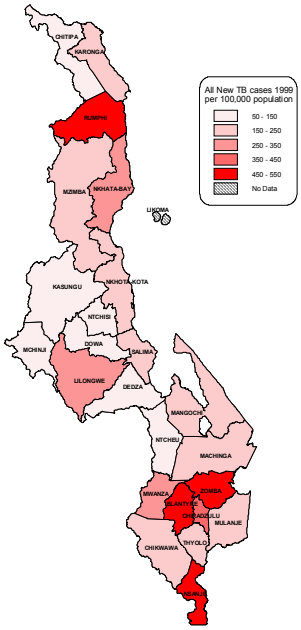
THEMATIC AREA	Indicators (process and outcome)	Possible Data Source
2. EQUITABLE ACCESS TO ART WITH REALISTIC TARGETS		
Objective: To measure equity in access to ART for disadvantaged groups		
Who accesses ART	*outcome* Ratio of rural/urban people on ART (by age, SES) Ratio of poor/non-poor people on ART (by geographical region) Ratio of men/women on ART (by geographical region, SES) Ratio of women, orphans, children on ART to the general population/men Proportion of people who cannot pay to have access to ART % Districts with at least one centre providing ART Proportion of the poor/women/rural to non-poor/men/urban residents on ART after 6,12,24 months Proportion of the poor/women/rural to non-poor/men/urban residents who gain at least 10% of weight 6 months after ART *Outcome* Ratio of TB/HIV prevalence to ART allocation	In-depth studies; sentinel monitoring; Facility exit interviews Population based survey (e.g. DHS) MOH ART Registers ART Registers MOH
Cost of ART		In depth research

Figure III gives an example of how such national-level data could be synthesised and presented (using TB data). This type of data analysis would use existing data, but would require additional inputs to analyse and synthesise it into tables, graphs, and Geographical Information System formats.

Figure III: Hypothetical examples of how national-level data on equity in access can be synthesised and presented (using TB examples)



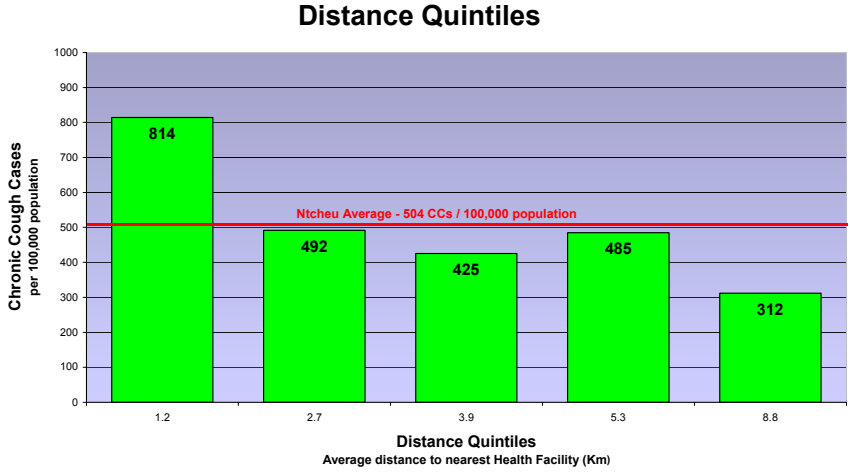
(i) (above) Normalised sex ratios of people accessing ART by district per year
(ii) (below) % of people accessing ART per 100,000 population per district



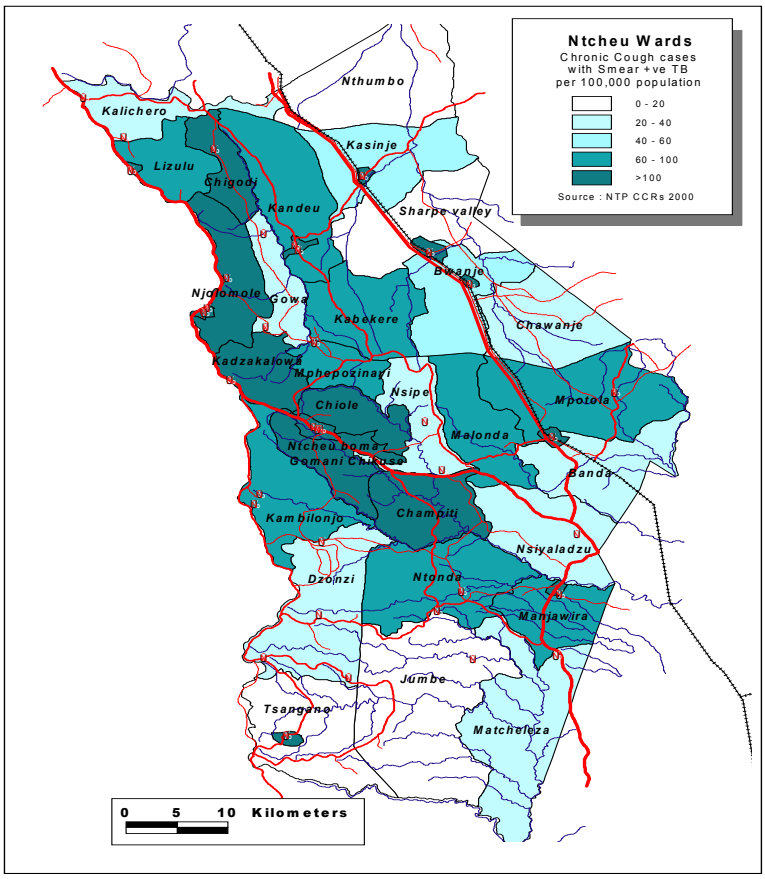
Some districts in Malawi have health information systems which allow for a more in-depth analysis of ART access data. Thyolo district, for example, working with MSF-Luxembourg, has all its' HIV clinic data available electronically, and have additional staff supporting district HIV and AIDS services. In such situations it is possible to conduct more in-depth site surveillance of 'who' is accessing ART, and essential health services. Indicators would be similar to those monitored at national level, but such capacities at subnational level make it possible to collect more information to include in the analysis (on poverty status of patients, for example).

Figure IV: Examples of 'sentinel-type' monitoring of ART access (using TB data examples)

(i) Graph showing people on ART by distance quintiles to the nearest health facility



(ii) Map showing people accessing ART per 100,000 population by electoral wards in one district in Malawi.



6.3.3 Fair and sustainable financing and accountable financial management

Equity and health systems policy issues

ART scale-up comes with substantial new funding. This funding could be additional to existing health funding, it could also be directly or indirectly from Government of Malawi allocations. For the infected, ART has to be taken for life. ART funding mechanisms must therefore be sustainable and not additionally burden national systems. In Malawi GOM and its' partner donors are at the point of signing a Memorandum of Understanding on a Sector Wide Approach, which includes basket funding mechanisms to MOH from some core donors. Funding to support ART scale up needs to be channelled, and monitored in line with other funding to MOH. Furthermore disbursement mechanisms must be efficient so that ART is available in time and across all geographical locations. Priority areas for funding include the strengthening of district health systems, particularly peripheral health services, and the financial management monitoring needs to be able to elucidate this. Inappropriate funding mechanisms could enhance inequities in access to ART and overburden a poorly functioning health system.

Possible indicators

Ratio of ART allocations to essential health services support needs to be monitored. Financial flows need to be monitored in terms of different regions & districts; levels of the health system and primary care vs. ART allocations. For this theme, the major indicators could include:

- overall increases in health funding (is ART funding truly 'additional'?)
- % of health budget allocated to ART services in comparison to essential services (input indicator)
- ratio of funds supporting vertical projects vs. direct sector funding (e.g. through SWAp, GOM allocations) (output indicator)
- National Health Accounts published

Current sources of data

Ministries of Health and NAC could be the sources of these indicators, but there may need to be further capacity development to produce the analyses. In Malawi civil society organisations such as MEJN have been involved in budget monitoring activities and may be in a position to carry out an 'equity' budget analysis.

Summary

THEMATIC AREA	**Indicators (process and outcome)**	**Possible Data Source**
3. FAIR AND SUSTAINABLE FINANCING AND ACCOUNTABLE FINANCIAL MANAGEMENT		
Objective: To measure financial sustainability of ART		
Financing	*output* % of national budget allocated to ART % of annual government expenditures on ART % of private sector expenditures allocated to ART	Ministry of Finance/Treasury Ministry expenditure reports Private sector expenditure reports
Mechanisms of disbursement	Disbursement mechanisms published	MOH
Efficiency of disbursement	Timeliness of disbursement published	MOH
Implementation	ART projects implementation rate	NAC/MOH
Absorption capacity	Assessment report on absorption capacity published	NAC/UNAIDS
Health and HIV AND AIDS funding/financing	EHP published	MOH
Government allocation/SWAP/Donor allocation	Amount of funds spent by international donors and national governments on HIV AND AIDS per year Amount of funds supporting vertical projects Amount of funds in basket funding/SWAP	Survey on financial resource flows
Prevention/ART	Proportion of all HIV AND AIDS funding allocated to ART Proportion of all HIV AND AIDS funding allocated to prevention Ratio of funding allocated to ART and prevention	Survey on financial resource flows
Region/Need	Criteria for supply ART to districts/region published	MOH
Level of health system	Proportion of central, district, rural hospital, health centre, dispensaries providing ART	MOH

Limitations

Countries in the region would need to strengthen capacity in national budget analysis, including HIV and AIDS budget analysis. In Malawi, the Policy Project has identified officers in the Ministry of Health and NAC to undergo the GOALS training programme in this area. It would however be useful if independent organisations were involved in this analysis, on an annual basis, and if the data was reported to national stakeholders.

6.3.4 ART programme integration into essential health services

Equity and health systems policy issues

In most affected countries, AIDS and other HIV and AIDS related infections are a major burden on all levels of the health system. The tension in needing to scale up ART rapidly is that vertical delivery systems may be developed. These have been demonstrated in other interventions to divert resources from the delivery of essential services. In order to strengthen essential health services in Malawi, ART will therefore have to be included and costed as part and parcel of the Essential Health Package (EHP). Planning, implementation and routine monitoring will have to be integrated into district health systems. This should help to ensure that the benefit and momentum behind additional funding for ART scale-up is harnessed for all essential health services.

Possible indicators

Indicators for this theme area include:

- ART plans and budgets are integrated into district plans and EHP
- ORT costs for EHP service supported through ART funding
- % ART uptake, # ART visits monitored against trends in (e.g.) # ANC visits
- # Child immunisation visits
- # ART visits vs. trends in total ambulatory care visits and child ambulatory visits
- % patients on second line ART regimens
- % ART complications admissions/total admissions

Current sources of data

The Health management and information system (HMIS) and the Planning Unit of the Ministry of health are the current sources of these indicators. They are routinely collected as part of the HMIS although a more in-depth analysis of the data will need to be carried out.

Summary

THEMATIC AREA	**Indicators (process and outcome)**	**Possible Data Source**
4. ART PROGRAMME INTEGRATION INTO THE DELIVERY OF THE ESSENTIAL HEALTH PACKAGE		
Objective: To integrate ART into delivery of essential health services		
Integration reinforcement	*input* ART integrated into EHP	MOH, Planning Unit
Physical infrastructure	Infrastructure assessment report	MOH, Technical Services Unit
Training and supervision	Quarterly supervision reports	MOH, HIV/AIDS Unit

Planning, Monitoring & Evaluation	P, M&E Unit established, staffed and functional within MOH HIV/AIDS Unit	MOH
Referral	Referral guideline published	MOH, HIV/AIDS Unit, Reproductive Health Unit
Quality of service – including laboratory service	Quality assessment report	Facility Survey

Limitations

These indicators, even though readily available are not incorporated into the national HIV and AIDS M& E system maintained by NAC. The proposed analysis for this theme would be to have a national body analysing the data from the HMIS, relating it to ART scale-up and feeding the results into NAC's M&E system.

6.3.5 Prioritised human resource development to deliver essential health services

Equity and health systems policy issues

In most developing countries which are most affected by HIV and AIDS, lack of human resources is arguably the most limiting factors in providing ART and running health systems in general. The additional funding which comes with ART could potentially lead to projectisation of ART services, *de facto* priority setting, staff leaving other areas of the health service to ART services, delivered through a number of different providers. Alternatively ART funding could be used to bolster staff providing essential health services. ART scale-up should therefore include plans to fill staffing gaps in the public health system; train new health staff; train existing staff; improve terms and conditions and motivate for existing staff to meet the new demands on health services. These initiatives must apply across the health sector, not only to HIV and AIDS (or ART) related services.

Possible indicators

The major indicators for this theme could therefore include:

- # of staff retained in the public sector (showing trends over previous years) (output indicator)
- # of staff re-employed within the public health sector (output indicator)
- # of new staff employed (input indicator)
- # long-term ill staff returned to work
- re-deployment of staff due to ART scale up
- changes in staff motivation (qualitative study)
- % change in time for staff for ART co-ordination and reporting tasks

Current sources of data

These indicators are available from various sources including the Ministry of Health, although a recent study in Malawi suggests that current staff monitoring systems are not accurate (Aitken and Kemp, 2003).

Summary

THEMATIC AREA	Indicators (process and outcome)	Possible Data Source
5. PRIORITISED HUMAN RESOURCE DEVELOPMENT TO DELIVER THE ESSENTIAL HEALTH PACKAGE		
Objective: To integrate human resources and ART policy		
Motivation	*output* Staff motivation report	Facility survey
Workload and time allocation	Nurse/Doctor population ratio # staff moved from other service provision areas to ART provision without replacement	Facility survey Health Service Commission
Salaries and incentives	Staff salary revision policy published	Health Service Commission
New employment	# of new staff employed (by area)	MOH, Planning Unit
Re-employment	# of staff re-employed in the health system (by area)	MOH, Planning Unit
Retention	Proportion of staff retained over previous year	MOH, Planning Unit
Deployment/distribution	Staff re-deployment report published	MOH, Planning Unit

Limitations

It may be necessary to collect information on human resources by 'sentinel'-type monitoring or periodic surveys.

6.3.6 Sustainable & accountable purchase, distribution and monitoring of drugs and commodities for ART

Equity and health systems policy issues

ART scale-up will affect the drugs and commodities procurement and logistics policies of countries. Most of these systems are already weak and do not function to expectation. To strengthen existing health systems, procurement and distribution of ART has to be done through the same procurement and logistics systems. ART scale-up should therefore be used as a spring-board to strengthen these systems.

Possible indicators

The major indicators for this theme would be:

- ART on list of essential drugs (input indicator)
- ART procurement guidelines published (input indicator)
- Periodic independent ART stock and essential medicines stock report published by area/facility (output indicator)
- Increases in amount and availability of essential drugs
- % change in condoms procured and distributed
- % in gloves procured and distributed
- % in ampicillin syrup, penicillin and ciprofloxacin procured and distributed
- % change in proportion of ART supplied in relation to other commodities (e.g. condoms, gloves, antibiotics etc)

Current sources of data

The Central Medical Stores (CMS) could be the source of these indicators. It is not clear if CMS compiles them and report them in some usable form. The Reproductive Health Unit (RHU) in the Ministry of Health carries out annual stock reports in clinics sampled from across the country. While the final report reports on contraceptive and antibiotics stock-out reports, ART is currently not reported on. Civil society monitoring of the availability of essential drugs in peripheral health facilities has also been undertaken. This monitoring could be expanded to reflect ART in addition to essential drugs

Summary

THEMATIC AREA	**Indicators (process and outcome)**	**Possible Data Source**
6. SUSTAINABLE AND ACCOUNTABLE PURCHASE, DISTRIBUTION AND MONITORING OF DRUGS AND COMMODITIES FOR ART AND THE ESSENTIAL HEALTH PACKAGE		
Objective: To integrate ART procurement into existing drug and commodities procurement procedures		
Policy environment	Input ART Policy Published	MOH/NAC/Policy Project
Essential drugs	Input ART on list of essential drugs	MOH
Quality specification	ART quality specification published	MOH
Procurement	ART procurement guidelines published	MOH
Utilisation	*output* Utilisation rate/Consumption report	MOH/DELIVER
Accessibility	Proportion of the general population with access to ART	Population based survey, e.g. DHS
Availability	ART stock report by area/facility	MOH/DELIVER/Medical Stores
Financial resources	Proportion of PLWAS with no access to ART due to cost	Facility survey/Population based survey
Monitoring	ART prescription report ART use supervision report	MOH
Security	ART pilferage report	MOH/DELIVER/Medical Store

Limitations

The data collected by the CMS, RHU and civil society monitoring should be consolidated and be used as a source of data to feed into an annual equity picture.

6.3.7 Ensuring private sector provision of ART is complementary to and enhances public health systems

Equity and health systems policy issues

The spread of the HIV and AIDS epidemic from small high risk groups into the general population (generalised epidemic) will provide an environment where the private sector will become providers of ART. The private sector encompasses a number of providers ranging from for profit and not-for-profit, formal and informal or traditional. The private sector comprises: commercial clinics, mission hospitals, international and local NGOs, CBOs and PVOs, traditional healers. The Malawi Position Paper on Equity in ART recognises that the private sector must work in

concert with public sector provision of ART in order to (i) not undermine efforts by providing non-standard ART regimens (ii) to harness the additional capacity already present in the private sector, so that public sector provision is not overwhelmed by demand. The involvement of the private sector will also become paramount, for reasons of sustainability, in providing ART through cost sharing and insurance schemes. The involvement of the private sector, and particularly research organisations and NGOs, will entail inevitable changes in the public health system. These changes could either be beneficial or counter-productive.

Possible indicators

The involvement of the private sector will necessitate regulation and monitoring from the relevant regulatory bodies in the public sector. The major indicators for this theme would be:

- Private sector providers trained and certified in national ART guidelines
- Registers of private providers providing ART
- Formal agreements with NGOs, mission hospitals etc to extend coverage of ART and essential health services
- Regulatory bodies funded and operational in monitoring private sector providers (ART and delivery of other services)
- ART/private sector regulation report published (output indicator)
- proportion and types of people on ART accessing it through the private sector (output indicator)

Current sources of data

There is a paucity of data on public-private mix in Malawi. This is one area where new institutional efforts are required to collect the right data. Regulation bodies, like the Malawi Medical Council, Malawi Medicines and Poisons Board and the Ministry of Health itself could be tapped on to synthesise the required data to be fed into an annual equity report.

Summary

THEMATIC AREA	**Indicators (process and outcome)**	**Possible Data Source**
7. ENSURING PRIVATE SECTOR PROVISION OF ART IS COMPLEMENTARY TO AND ENHANCES PUBLIC HEALTH SYSTEM CAPACITY		
Objective: To harmonise ART provision partnerships between public and private sector institutions		
Regulation/Monitoring	*output* ART/private sector regulation report published	MOH/Medical Stores
Partnerships	Private sector monitoring report # of new private sector providers in rural areas Proportion of people on ART accessing it through the private sector	MOH/Medical Stores HIS/MOHP registration data NAC activity report

Limitations

Data on public private mix, if not already being routinely or periodically collected as a requirement, may need new financial resources and activities. The private sector may also not appreciate the importance of such data. Quality may be compromised if private sector practitioners do not appreciate the importance of measuring equity in access and health systems impacts.

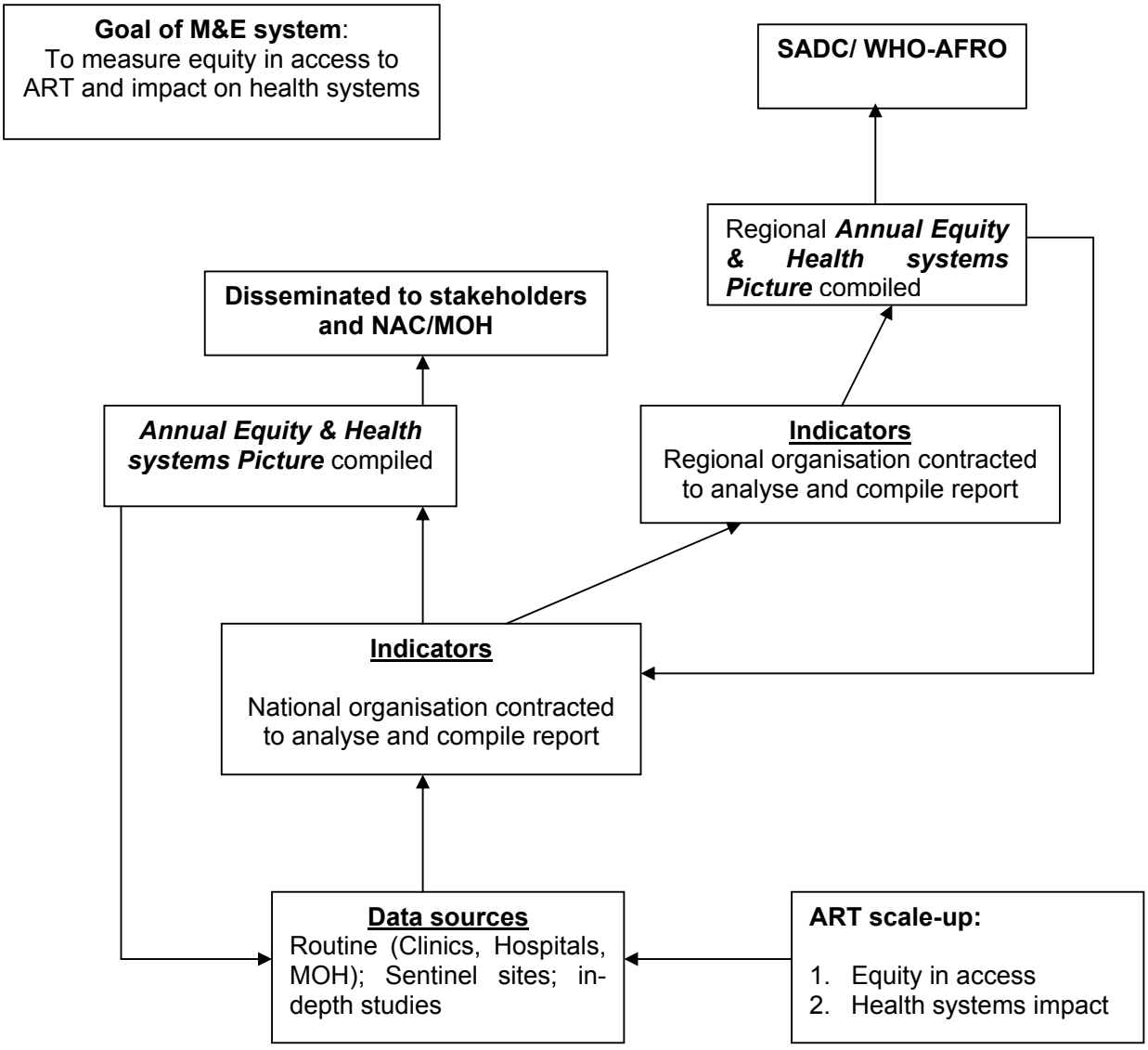
7.0 Institutional framework for equity analysis, synthesis and feed back

In the proposed monitoring framework, various players at local, national and regional level will have specific tasks to carry. Figure IV shows the relationship between these various players.

At Regional level, SADC and WHO (AFRO) will receive an annual equity and health system report. This report could be used to feed into their programming cycles to inform regional or country level interventions. This analysis can be implemented through an identified co-ordinating institution in the region. The report submitted to the SADC secretariat will be used in the annual reporting to the Integrated Council of Ministers as outlined in the SADC Business plan.

National level: Most of the data analysis will be done at national level. A national level organisation should be identified and sub-contracted to co-ordinate the analysis of data and compilation of an annual equity and health systems picture report. This report should feed into the national M&E system maintained by NAC.

Figure V: Data flow in proposed M&E system



7.1 Country level issues

Institutional structures to conduct monitoring

Monitoring equity in health is a new concept in Malawi, although national policies (e.g. National HIV and AIDS Policy and National Health Plans) clearly articulate equity principles. In terms of organisational structures, the National AIDS Commission has the mandate to co-ordinate and monitor HIV and AIDS activities in Malawi. The Ministry of Health is the main implementer of HIV and AIDS services. Both institutions work in partnership with multi-lateral and bi-lateral organisations, Non-Governmental Organisations (health service) implementers, researchers and a wide range of civil society organisations.

Based on these institutional arrangements, monitoring equity in access to ART and system strengthening should be co-ordinated by the National AIDS Commission, but it will require the collaboration of several partners. The main partner will be Ministry of Health and Population, but all other partners may have a role to play. To be effective roles and responsibilities should be clearly articulated.

Frequency of reporting

Equity monitoring needs to fit into the annual routine reporting and review cycle of the National AIDS Commission. To do this, it must be incorporated as an area of monitoring in the M&E Plan. Once formally incorporated, the Working Group will be required to produce annual reports. These are reviewed by the overarching HIV and AIDS Technical Working Group and are submitted to the National AIDS Commission Board.

In advance of the formal review process, it will be important to follow an accountable process of dissemination and feedback (following the principles of 'fair process' adopted in the policy development). This process may include wide dissemination (e.g. publication and summaries through popular communication media, structured consultations with specific target groups, and national level consultations with representative organisations). It is proposed that a summary of the annual report is published in a user-friendly format, for example as a glossy five-six page 'Annual Equity Picture'. It will be important to document the feedback and recommendations arising from this consultation process and to ensure that this feedback is incorporated into the report that is formally submitted to the NAC Board.

Policy responsiveness

The annual review process should produce recommendations for action, and possibly revision of Equity in ART policy. In order to achieve this, the Equity in ART Working Group must clearly identify which organisations/actors are responsible for effecting change and ensure that change is communicated clearly and action is taken.

7.2 Regional level

It is necessary to identify similar institutions in each country to be responsible for producing annual reports and *Annual Equity Pictures*. It is also proposed that the southern Africa/SADC region can, with support from EQUINET, produce a combined *Regional Annual Equity Picture*, through synthesising regional equity data. Such a regional picture would be a useful advocacy tool to lobby for increased resources for ART and health system strengthening in the region. As treatment literacy programmes grow, the major limitation to ART programmes is likely to be financing to purchase ARVs and capacity to deliver, most notably human resources. Such limitations may result in an inequitable scenario where only the advantaged will access ART. A regional picture, depicting inequities in access to ART, and critical heath system would be an advocacy tool for increased support to the region.

Regional level work can also be implemented to develop guidelines for monitoring health systems and equity issues, and to support the capacity and training inputs for the implementation of this monitoring within interested countries.

While an overall picture can be compiled at regional level, specific capacities can also be supported in key areas of monitoring, such as budget monitoring for HIV and AIDS. The AIDS Budget Unit, Budget Information Service (BIS), of the South African

organisation IDASA ,has developed such a capacity (Hickey et al., 2003). Lessons from the IDASA approach should be used to build technical capacity in NACs, Ministries of Health and Finance and civil society in the region to track funds going into HIV and AIDS. Such information should be analysed to elicit equity issues in financial resource flows. Since the region has now an integrated regional HIV and AIDS policy and strategy, which includes creating mechanisms for the bulk purchase of medicines and manufacturing of generic drugs (www.sadc.int, accessed 26th August, 2003), the region could also incorporate into the strategy an M&E system, based on this framework, to monitor equity in access to those drugs.

It should be noted however that for monitoring to take place at country or regional level, there should be an enabling environment to carry out monitoring functions. There should be effective working relationships between various institutions. There must also be willingness to monitor and openness to the findings, good data systems, good quality and realistic M&E systems and accessibility to data.

8.0 Filling the Gaps through Research

Since not all monitoring data requirements can be obtained through existing routine systems, it would be necessary to get additional data through in-depth and qualitative studies. Equity and health systems monitoring should therefore be complemented by sentinel surveillance and some in-depth studies.

Studies could for example be carried out on:

- Barriers to access to and adherence to ART for different population groups
- Policy analysis on transparency of decision making on ART.
- Impact of ART provision on motivation, terms and conditions (etc) for human resources
- How ART roll out effects overall HIV and AIDS situation, health systems and health care delivery
- Whether policy formulation, programme design and implementation is based on community policy priorities
- Opportunity costs and benefits for other key public health problems in ART roll out

The HIV and AIDS Unit in the Ministry of Health, Malawi, has proposed a research agenda which if implemented could complement routine monitoring for equity to ART (MOH, 2004). Some proposed research questions of the Unit include:

- Evaluation of interventions to promote equity in access to treatment
    - Assess effectiveness of targeted communication strategies to promote demand among key groups (does it increase access?)
    - Assessment of community based interventions, including communication strategies to support guardians and home based care providers
- To determine if the provision of ART detracts from or supports the implementation of the general health service delivery.
- Routine operational studies documenting what proportion of poor and non-poor patients on ART are well and ambulatory and are at work
- Evaluation of 'best practice' in terms of strengthening health systems though ART roll out

Human resources have been identified as one of the major barriers to service provision in the health sector. A sentinel type of study, in clinics and hospitals could

be set up. This could be tracking a "profit and loss account" to observe staff leaving, joining and looking at the balance at points in time. This could be more clear than looking at retention and motivation alone. These sentinel sites could be categorised into public/MOH, CHAM, international and local NGO, research and private sector.

In addition to documenting 'who' (in terms of population groups) accesses ART, it is important to collect in-depth information on 'why' some groups are excluded. In Malawi, Makwiza et al. (2004) identified cost, stigma and discrimination as some of the barriers to accessing ART in Lilongwe. Botswana, which has the most successful ART programme in the region, identified stigma and migration as factors associated with poor adherence (Weiser et al., 2003). In Cote d'ivoire, low socio-economic status was associated with lack of access to ART (Msellati et al., 2003). A monitoring system of equity in access to ART, would therefore need to develop in-depth studies on possible barriers to access to services, which will then inform the routine monitoring system. Issues which may be important to assess are: cost, stigma and discrimination, harmful and discriminatory gender norms, ethnic, educational and geographical isolation and service delivery capacity.

Actively using the monitoring evidence to review policy and planning can feed into national discussions to identify key areas for follow up operational research that has immediate relevance to programme planning and implementation.

9.0. Next steps

EQUINET has proposed a regional meeting to be held in Malawi from 7- 9th October 2004. This report is tabled for discussion at that meeting to guide and inform discussion on the proposed thematic areas for monitoring and the indicators proposed. This national case study from Malawi provides a case study drawn from the reality of one country in the region of what such a monitoring system may include. It is hoped that the meeting will critically review the options for monitoring, the proposed indicators in the theme areas and how they will be incorporated into the existing M&E system maintained by the National AIDS Commissions/Councils in the region. Specifically it is proposed that the meeting:

- Agree on the policy commitments/ issues/ questions being monitored
- Agree on and refine the thematic areas that respond to these policy concerns and the monitoring objectives in each
- Review and agree on the principles of a monitoring system at national and regional level
- Agree on or modify/add on the proposed indicators and sources and responsible institutions for their collection and analysis
- Agree on analysis of indicators and reporting to address policy issues
- Discuss and agree on the institutional framework for a monitoring system at national and regional level, with roles and relationships, in line with and incorporated into existing NAC M&E plans
- Identify the follow up pilot work, training, and other measures to be taken to implement all or part of the system and roles in taking this forward

Acknowledgements

The ideas in the monitoring framework were developed from conversations with various people from the National AIDS Commission, Ministry of Health, Policy Project and MHEN as listed in Appendix VI. Thanks also to all staff at the Equi-TB Knowledge Programme in Malawi and the TB Knowledge Programme at the Liverpool School of Tropical Medicine for support. Many thanks to Dr Rene Loewenson, David McCoy and Matt Boxshall for their valuable comments on an earlier draft of this paper. Technical edit of this paper for EQUINET was carried out by Rene Loewenson, TARSC.

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Appendix I: Framework for monitoring equity in access and health system issues in ART programmes in Southern Africa

THEMATIC AREA	Notes	Indicators (process and outcome)	Possible Data Source
1. FAIR POLICY DEVELOPMENT, MONITORING AND ACCOUNTABILITY THROUGH FAIR PROCESS **Objective: To measure fair process in policy development**			
Fair process in policy development	Process of policy making on access complies to (from Daniels 2004): Publicity Condition: The process must be transparent and involve publicly available *rationales* for the priorities that are set. Relevance Condition: Stakeholders affected by these decisions must agree that the rationales rest on reasons, principles and evidence they view as *relevant* to making fair decisions about priorities. Revisability and Appeals Condition: The process allows for revisiting and revising decisions in light of new evidence and arguments, and allows for an appeals process Enforcement or Regulation Condition: There is a mechanism in place that assures the previous three conditions are met. Are protocols on rationing and patient selection being followed?	Input/output ART policy developed through documented participatory process Decisions on policy changes documented at each stage Annual 'equity picture' (annual report) published Consultation on 'equity picture' through documented participatory process Policy changes made and implemented (if necessary) *output* Policy published	NAC records – meeting reports and documents
Policy implementation:	How effectively is the Equity ART policy being	*output*	

Treatment /Health system literacy	implemented?	# of media ART radio/television programs produced and number of hours aired	NAC/MOH activity reports
		# of and types of communication media on ART and distributed	NAC/MOH activity reports
		# of gender sensitive and targeted media ART radio/TV programs produced and number of hours aired	NAC/MOH activity report form
		proportion of clinics adhering to access to ART protocols	MOH supervision reports
		Outcome % of people with accurate knowledge on the effect of ART (by age group, sex, SES, rural/urban)	Population survey
		% of people who know where to access ART (by age group, sex, SES, rural/urban	Population survey
Accountability in annual monitoring cycle and feedback	How to maintain transparency and accountability in the monitoring of the implementation of the ART policy	output Annual report compiled and published	National AIDS Commission report (with support from partner

		Monitoring findings disseminated through participatory process Feedback and decisions on policy changes documented at each stage Report formally reviewed through NAC monitoring processes	organisations)
2. EQUITABLE ACCESS TO art WITH REALISTIC TARGETS **Objective: To measure equity in access to ART for disadvantaged groups**			
Who access ART	Which groups of people access ART? Which groups do not access ART and why?	*outcome* Ratio of rural/urban people on ART (by age, SES) Ratio of poor/non-poor people on ART (by geographical region) Ratio of men/women on ART (by geographical region, SES) Ratio of women, orphans, children on ART to the general population/men Proportion of people who	In-depth studies; sentinel monitoring; Facility exit interviews

		cannot pay to have access to ART % Districts with at least one centre providing ART Proportion of the poor/women/rural to non-poor/men/urban residents on ART after 6,12,24 months Proportion of the poor/women/rural to non-poor/men/urban residents who gain at least 10% of weight 6 months after ART Outcome Ratio of TB/HIV prevalence to ART allocation	Population based survey (e.g. DHS) MOH ART Registers ART Registers MOH
	Which areas of the country have ART? Is ART being allocated according to HIV/TB burden?		
Cost of ART	Cost benefit analysis targeted provision of ART		In depth research
3. FAIR AND SUSTAINABLE FINANCING AND ACCOUNTABLE FINANCIAL MANAGEMENT **Objective: To measure financial sustainability of ART**			

Financing	Are new ART finances used to strengthen existing financial systems?	*output* % of national budget allocated to ART % of annual government expenditures on ART % of private sector expenditures allocated to ART	Ministry of Finance/Treasury Ministry expenditure reports Private sector expenditure reports
Mechanisms of disbursement	Are disbursement mechanisms for ART funding clear?	Disbursement mechanisms published	MOH
Efficiency of disbursement	Does funding for ART reach intended organisations timely?	Timeliness of disbursement published	MOH
Implementation		ART projects implementation rate	NAC/MOH
Absorption capacity	Is there national capacity to use all allocated funds?	Assessment report on absorption capacity published	NAC/UNAIDS
Health and HIV AND AIDS funding/financing	Is the financing of HIV AND AIDS/ART incorporated into the general health financing?	EHP published	MOH
Government allocation/SWAP/Donor allocation	Is government committing counterpart funds for HIV AND AIDS? Are finances (donor finances) used to support vertical programmes or incorporated in SWAP?	Amount of funds spent by international donors and national governments on HIV AND AIDS per year Amount of funds supporting vertical projects Amount of funds in basket funding/SWAP	Survey on financial resource flows Survey on financial resource flows

			Survey on financial resource flows
Prevention/ART		Proportion of all HIV and AIDS funding allocated to ART Proportion of all HIV and AIDS funding allocated to prevention Ratio of funding allocated to ART and prevention	Survey on financial resource flows Survey on financial resource flows Survey on financial resource flows
Region/Need	Is ART allocation to regions/districts by need?	Criteria for supply ART to districts/region published	MOH
Level of health system	Is ART available at all levels of the health system? Does unavailability of ART at the lower levels of the health system imply people using that level of the system have less access to ART?	Proportion of central, district, rural hospital, health centre, dispensaries providing ART	MOH
4/ ART PROGRAMME INTEGRATION INTO THE DELIVERY OF THE ESSENTIAL HEALTH PACKAGE **Objective: To integrate ART into delivery of essential health services**			
Integration reinforcement	Is there integration of ART into the EHP?	*input* ART integrated into EHP	MOH, Planning Unit
Physical infrastructure	Is there the right physical infrastructure to provide ART?	Infrastructure assessment report	MOH, Technical Services Unit

Training and supervision	Are health personnel provided with adequate training and supervision to prescribe ART	Quarterly supervision reports	MOH, HIV AND AIDS Unit
Planning, Monitoring & Evaluation	Does the HIV AND AIDS Unit have capacity to plan monitor and evaluate the ART programme	P, M&E Unit established, staffed and functional within MOH HIV AND AIDS Unit	MOH
Referral	Is there appropriate referral for people using the health service and in particular those that could be living with HIV AND AIDS	Referral guideline published	MOH, HIV AND AIDS Unit, Reproductive Health Unit
Quality of service – including laboratory service	Is the health service quality appropriate to provide ART?	Quality assessment report	Facility Survey
5. PRIORITISED HUMAN RESOURCE DEVELOPMENT TO DELIVER THE ESSENTIAL HEALTH PACKAGE **Objective: To integrate human resources and ART policy**			
Motivation	Are staff motivated? Is there high staff productivity in the health system? What is the lost time/absenteeism status? Is there a policy to provide ART and PEP to heath workers? Is new ART financing being used to provide incentives and training to health workers from all service delivery areas? Is attrition increased by perception or poor	*output* Staff motivation report	Facility survey

	infection prevention in clinics?.		
Workload and time allocation	Does the health system have adequate personnel? Do ART programmes lead to staff re-deployment?	Nurse/Doctor population ratio # staff moved from other service provision areas to ART provision without replacement	Facility survey Health Service Commission
Salaries and incentives	Are staff adequately paid?	Staff salary revision policy published	Health Service Commission
New employment	Are new staff being employed	# of new staff employed (by area)	MOH, Planning Unit
Re-employment	Are staff being re-employed	# of staff re-employed in the health system (by area)	MOH, Planning Unit
Retention	Are more staff being retained in the health system?	Proportion of staff retained over previous year	MOH, Planning Unit
Deployment/distribution	Are staff being deployed according to areas of need in the health system?. Are staff being deployed according to ART provision work load and other needs in the health system?	Staff re-deployment report published	MOH, Planning Unit
6. SUSTAINABLE AND ACCOUNTABLE PURCHASE, DISTRIBUTION AND MONITORING OF DRUGS AND COMMODITIES FOR ART AND THE ESSENTIAL HEALTH PACKAGE **Objective: To integrate ART procurement into existing drug and**			

commodities procurement procedures			
Policy environment	Does the national response have ART policy on accordance with the TRIPS agreement? Are ART procurement, distribution and monitoring procedures integrated and financed together with other drugs and commodities?	Input ART Policy Published	MOH/NAC/Policy Project
Essential drugs	Is ART on list of essential drugs?	Input ART on list of essential drugs	MOH
Quality specification	Is ART quality clearly specified?	ART quality specification published	MOH
Procurement	Are ART procurement procedures clear and made public? Is ART distribution and logistics system known and functional? Is ART procurement integrated with that of other drugs and commodities?	ART procurement guidelines published	MOH
Utilisation	Is ART being utilised?	*output* Utilisation rate/Consumption report	MOH/DELIVER
Accessibility	Is ART accessible	Proportion of the general population with access to ART	Population based survey, e.g. DHS
Availability	Is ART always available?	ART stock report by area/facility	MOH/DELIVER/Medical Stores
Financial resources	Is cost a limitation to utilising ART? How is ART being rationed?	Proportion of PLWAS with no access to ART due to cost	Facility survey/Population based survey
Monitoring	Is ART being appropriately prescribed?	ART prescription report	MOH

		ART use supervision report	
Security		ART pilferage report	MOH/DELIVER/Medical Store
ENSURING PRIVATE SECTOR PROVISION OF art IS COMPLEMENTARY TO AND ENHANCES PUBLIC HEALTH SYSTEM CAPACITY **Objective: To harmonise ART provision partnerships between public and private sector institutions**			
Regulation/Monitoring		*output* ART/private sector regulation report published	MOH/Medical Stores
Partnerships	What are the known formal partnerships between the public and private sector in ART provision? Is the private sector contributing to the ART programme in rural areas? Are there known informal partnerships between the public and private sector in ART provision? Are islands of excellence emerging in the private or NGO sector?	Private sector monitoring report # of new private sector providers in rural areas Proportion of people on ART accessing it through the private sector	MOH/Medical Stores HIS/MOHP registration data NAC activity report

Appendix II: Terms of Reference

To propose a framework for a comprehensive national monitoring system for equity in access and health systems support in ART programmes, and outline options for areas of regional analysis and for follow-up research on priority health systems issues not able to be addressed through monitoring. The specific objectives were:

1. To outline what constitute equitable access and health system strengthening approach to ART scale-up
2. To review available evidence on equity in access and health system strengthening monitoring proposed or being conducted in the region
3. Identify and prioritise policy debates for which the monitoring system will inform and that can be addressed through monitoring, taking into account
    - Fair process in policy making for access to ART
    - Consistency between health system policies and ART roll out policies
    - Health systems and treatment literacy
    - Fair, sustainable financing for ART programming and extent of budget mainstreaming of new ART resources
    - Systems costs, benefits and opportunity costs
    - ART programme integration within and reinforcement of district and primary health care systems
    - Impact on health personnel numbers, distribution, motivation and management
    - TRIPS, essential drug lists and generic drug production, procurement and distribution
    - Effective public private mix
4. To identify key areas for monitoring to provide evidence for such analysis, including what needs to be monitored, what monitoring is currently being done and what new monitoring needs to be added. The framework should delineate the analysis of routine data, analysis of data from specific ART programmes or sentinel sites, additional survey or in-depth study monitoring.
5. To identify responsibilities for monitoring, equity analysis, synthesis and appropriate fora for feedback into the policy and implementation arenas.
6. To make recommendations on issues and areas of monitoring which would inform a regional focus and propose institutions/monitoring programmes to bring to a regional meeting on monitoring.
7. To outline areas for data collection that cannot be addressed through monitoring and require more in-depth research work.

Appendix III: People Consulted

Dr. Andrew Agabu	Head of Policy Support and Development, National AIDS Commission, Malawi
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John Chipeta	Monitoring and Evaluation Officer, National AIDS Commission, Malawi
Prof. Tony Harris	Technical Advisor, HIV AND AIDS Unit, Ministry of Health, Malawi
Paul Msoma	Co-ordinator, Malawi Health Equity Network
Dr. Andrina Mwansambo	Biomedical Policy Officer, National AIDS Commission, Malawi
Dr. Erick Schouten	Technical Advisor, HIV AND AIDS Unit, Ministry of Health, Malawi