

# Framework for monitoring equity in access and health systems issues in antiretroviral therapy Programmes in southern Africa

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## Abstract

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. 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. This paper, proposes a framework for monitoring equity in access and health systems issues in ART programmes in Southern Africa. It proposes that an equity monitoring system should comprise seven thematic areas. These thematic areas encompass a national monitoring system which extends beyond one agency or single data collection method. Together with monitoring of targets in terms of numbers treated, there should also be monitoring of health systems impacts and issues in ART expansion, with reporting both nationally and to a regional body.

## Introduction

Approximately 15 million adults and children in Southern Africa are currently infected with the Human Immunodeficiency Virus (HIV) and an estimated 700,000 – 1 million currently have Acquired Immune Deficiency Syndrome (AIDS).<sup>1</sup> As HIV and AIDS related mortality rates have fallen with new treatments available in high income countries, treatment access has become a central issue in the response to the HIV and AIDS epidemic in the Southern Africa region. With only one eligible person in 25,000 currently on treatment with antiretroviral therapy (ART) in the region, the shortfall is enormous. In light of these circumstances, the World Health Organisation (WHO) has launched the 3 x 5 initiative, to promote ART to 3 million people by the end of the year 2005.<sup>2</sup>

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 under funded or weak, particularly at the primary health care and district level.<sup>3</sup> 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.<sup>4</sup> 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.<sup>5</sup>

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<sup>5</sup> has developed and proposed a set of principles for strengthening health systems for treatment access. These principles include: (i) fair, transparent processes to make informed choices; (ii) joint public health and HIV and AIDS planning; (iii) integrating treatment into wider health systems; (iv) realistic targets for treatment access with clear guidelines and monitoring systems for ensuring equity in access and quality of care; (v) treatment resources integrated into regular budgets, supported by long term external commitments and through fair financing approaches; (vi) priorities human resource development in the health sector; (vii) strengthened essential drug policies and systems at national and regional level.

Following on the last principle above, this paper proposes a framework for monitoring equity in access and health systems issues in ART programmes in Southern Africa. It also outlines options for areas of regional analysis and for follow up research on priority health system issues not able to be addressed through monitoring.

## Methods

A 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 these themes, areas of equity and health systems which could be monitored were identified. Several discussions were held in Malawi with key stakeholders in the Ministry of Health, National AIDS Commission and partner organizations who have been involved in looking at equity issues in ART. Preliminary findings were presented to two Southern Africa regional meetings of NACs, MOHs and other stakeholders held in October 2004 and August 2005.

## Equitable Access, Health Systems and ART

Provision of ART in Southern Africa and other developing countries can potentially promote existing health systems or inadvertently lead to inequalities in the health systems. EQUINET<sup>3</sup> 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 1 shows the virtuous and vicious cycles.

### 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. In spite 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 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.

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. We have identified and proposed seven thematic areas<sup>3</sup> to monitor equity and health systems and they are as shown in Box 1.

A framework summary for each of these theme areas is available from the authors. The framework outlines each thematic area, indicators, possible data source, current data sources and limitations. From these thematic areas and the indicators developed, three core indicators for immediate monitoring have been suggested.

### Core Indicators for Monitoring Equity in Access to ART and Health Systems Issues

Most National AIDS Commissions/ Councils and Ministries of Health in the region have a large number of indicators to report at the end of each year. These are mostly linked to funding by both bilateral and multilateral donors. These include UNGASS, MDGs, and PEPFAR indicators. The M&E Plan for the Malawi National AIDS Commission for example reports on 59 indicators NAC. Adding further indicators to such M&E systems, with no links to funding obligations can be a challenge. While the proposed equity monitoring framework has a large number of indicators, three core indicators have been suggested to be collected as the first phase of instituting a comprehensive equity and health systems M&E framework. These three core indicators are depicted in Box 2.

### Box 1: Seven major thematic areas for monitoring equity and health

- 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 and 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

Source: EQUINET 2004

For these indicators, number of patients eligible for ART should be as estimated by WHO/UNAIDS in their annual reports. These three indicators could be further reduced to two indicators by combining indicators 2 & 3.

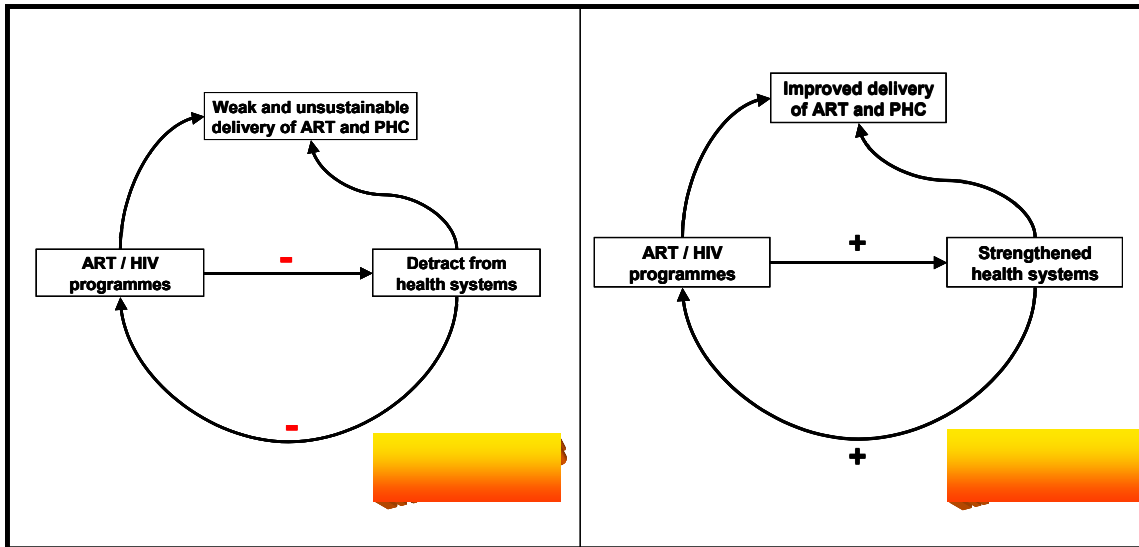
### Principles of an Equity and Health Systems Monitoring and Evaluation System

Firstly, the M&E system should be as simple as possible (simple and relevant) and be focused on agreed criteria for equity in access to ART and impact on health systems. Secondly, 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. Third, 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 (5). Fourth, for equity monitoring, it is important to establish a monitoring system which includes partner organizations and synthesizes evidence from many sources (Use all relevant data sources). As noted earlier, analysis and review of monitoring evidence should be done at sub national, national and regional level for

### Box 2: Three Core Indicators for Monitoring Equity in access to ART

- i. The number ART patients disaggregated by gender and by age as a share of the total number of people eligible for ART
- ii. The number of patients on ART disaggregated by level of care (primary, secondary (district), tertiary, central) as a share of total patients on ART
- iii. The number ART patients disaggregated by rural/urban tenure as a share of the total number of people eligible for ART

Figure 1: Relationship of provision of ART to health systems



Source: Equinet 2004

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.

### Institutional Framework for Equity Analysis, Synthesis and Feedback

In the proposed monitoring framework, various players at local, national and regional level will have specific tasks to carry. Figure 2 shows the relationship between these various players.

At Regional level, SADC and WHO (AFRO) would receive an Annual Equity and Health Systems 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 coordinating institution in the region. The report submitted to the SADC secretariat will be used for the annual report to the integrated Council of Ministers as outlined in the SADC Business plan.

Most of the data analysis will be done at national level. A national level organization should be identified and sub-contracted to coordinate 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 NACs or MOHs.

### 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 (a) barriers to access to and adherence to ART for different population groups; (b) policy analysis on transparency of decision making on ART; (c) impact of ART provision on motivation, terms and conditions (etc) for human resources; (d) how ART roll out effects overall HIV and AIDS situation, health systems and health care delivery; (e) whether policy formulation, programme design and implementation is

based on community policy priorities; and (f) opportunity costs and benefits for other key public health problems in ART roll out.

Human resources have been identified as one of the major barriers to service provision in the health sector in the Southern African region. 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 clearer than looking at retention and motivation alone. These sentinel sites could be categorized into public/MOH, international and local NGO, research and private sector.

In addition to documenting ‘who’ (in terms of population groups) accesses ART, it is important to know ‘why’ some groups are excluded. In Lilongwe, Malawi, cost, stigma and discrimination were identified as some of the barriers to accessing ART.<sup>6</sup> Botswana, which has the most successful ART programme in the region, identified stigma and migration as factors associated with poor adherence.<sup>7</sup> In Cote d’Ivoire, low socio-economic status was associated with lack of access to ART.<sup>8</sup> 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.

### Conclusion

Provision of ART in resource poor settings can be used to strengthen health systems. On the other hand, provision of ART can disrupt existing health systems by among other things creating islands of excellence and entrenching well

Figure 2: Data flow in the proposed M&E system

**Goal of M&E system:**

To measure equity in access to ART and impact on health systems

**SADC/ WHO-AFRO**

Regional *Annual Equity & Health systems Picture* compiled

**Disseminated to stakeholders and NAC/MOH**

*Annual Equity & Health systems Picture* compiled

**Indicators**

Regional organisation contracted to analyse and compile report

**Indicators**

National organisation contracted to analyse and compile report

**Data sources**

Routine (Clinics, Hospitals, MOH); Sentinel sites; in-depth studies

**ART scale-up:**

1. Equity in access
2. Health systems impact

funded vertical ART programmes. It is important to set up monitoring and evaluation systems to ensure equitable access to ART and to ensure that provision of ART does not disrupt health systems.

Due to an existing demand for monitoring data from bilateral and multilateral donors, it is important to concentrate on a few core indicators for monitoring equity in access to ART and health systems support.

For regional comparability and advocacy of equity in ART access monitoring, there is a need to impress on countries in the Southern Africa region to have both national and a regional body to collect, analyse and report on equity and

health systems data in ART programmes.

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## References

1. UNAIDS (2004). AIDS Epidemic Update, July, 2004. UNAIDS, Geneva
2. WHO (2003). Treating 3 million by 2005, making it happen, the WHO strategy. The WHO and UNAIDS initiative to provide anti-retroviral therapy to 3 million people with HIV and AIDS in developing countries by the end of 2005.
3. EQUINET (2004). Strengthening Health Systems for Treatment Access in Southern Africa: Summary of evidence from a programme of research and a regional meeting. Equinet Discussion Paper 15, Hunyani Printers, Harare.
4. Kemp, J., Aiten, J.M., LeGrand, S., Mwale, B. (2003). Equity in health sector response to HIV and AIDS in Malawi. EQUINET Discussion paper #5 Hunyani Printers, Harare.
5. McCoy D. (2003). Health sector responses to HIV and AIDS and treatment access in Southern Africa: addressing equity. EQUINET Discussion paper #10. Hunyani Printers, Harare
6. Makwiza, I.R., Neuhann, F., Chiunguzeni, D., Lalloo, D., Kemp, J.R. (2004). Patient's understanding of and barriers to adherence to antiretroviral therapy: The experience of Lighthouse, Malawi (unpublished results).
7. Weiser, S., Wolfe, W., Bangsberg, D., Thior, I., Gilbert, P., et al. (2003) Barriers to antiretroviral adherence for patients living with HIV infection and AIDS in Botswana. *J. acquired immune deficiency syndrome.*; 34(3):281-8.
8. Msellati, P., Juillet-Amari, A., Prudhomme, J., Akribi, H.A., Coulibaly-Traore, D., et al. (2003). Socio-economic and health characteristics of HIV infected patients seeking care in relation to access to the Drug Access Initiative and to antiretroviral treatment in Cote d'Ivoire. *AIDS.; AIDS.; (suppl 3): s63-s68.* Abstract.