

National Scaling up of ARV therapy in Malawi

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June 2005

Malawi

- **10.5 million people**
- **900,000 people infected with HIV**
- **170,000 people needing HAART**
- **4,000 people on HAART in January 2004**

Malawi: the steps to ARV scale up

- **Concept of ARV therapy using DOTS model**
(developed in 2001)
- **Global Fund proposal**
(submitted in 2002)
- **National ARV Treatment Guidelines**
(finalised in October 2003)
- **National ARV Scale Up Plan: 2004- 2005**
(finalised in February 2004)

The ARV Scale up Plan: the main elements

- 59 central, district and mission hospitals, including the Malawi Defence Force, to start ART in the first year
- First-line ARV regimen only
- Hospitals only start ART if assessed as being ready to deliver ART
- ARV drugs and HIV test kits in stock

Constraints to achieving rapid and country-wide scale up

- Capacity of the health sector to deliver
- Capacity of Central Medical Stores and UNICEF to procure and distribute
- Patient demand for HIV testing and ART

Perceived risks

- Drug security issues
- Poor drug adherence and therefore the promotion of drug resistance
- Impact on health sector: shift of staff from general duties to ARV duties
- Equitable access to ART
- Undue attention to care at expense of prevention

How ARV therapy is done!

Standardised case finding for ART

Patients eligible for ARV therapy:

- Positive HIV test + understand implications of ART
- WHO Clinical Stage III or Clinical Stage IV
- (CD4 counts $< 200/\text{mm}^3$ where applicable)

HIV-positive

↓ *same day*

Staged clinically as eligible for ARV therapy with no contraindications

↓ *within one week*

Attendance at group counselling session

↓ *one week*

Attendance for individual counselling and start of ART

HAART regimens in Malawi

- First line regimen: [2 NRTI + 1 NNRTI]
d4T+3TC+NVP (Fixed-dose combination)
“Triomune”
- Alternative first line regimens:
AZT+3TC+NVP
d4T+3TC+EFV
- Second line regimen:
AZT+ddI+NFV

**Standardised system of
registration, recording and
reporting**

Monitoring Tools

borrowed from TB model

- ARV Patient Treatment Master card
- ARV Identity card for the patients
- ARV Patient Register
- ARV Quarterly Cohort Analysis forms
- ARV Supervision and Monitoring forms

MINISTRY OF HEALTH AND POPULATION

ARV REGISTER BOOK

HOSPITAL: _____

ARV Registration Number	Year	Quarter	Date of registration	Name	Sex	Age	Address	Date first started ARV drugs	Reason for starting ARV drugs	Name of Guardian	ARV Treatment Unit
ARV/01	2004	3	July 3	Phiri	M	31	PO Box CMK	July 3	Stage III	John	CKW
ARV/02	2004	3	July 4	Nkhoma	F	29	TA 141	July 4	TB	Peter	CKW
ARV/03	2004	3	July 6	Kangombe	M	41	Montfort	July 6	Stage IV	JJW	CKW
ARV/04	2004	3	July 8	Tanbika	M	29	Nachalo	July 8	TB	ADH	CKW

Reason for starting ARV Drugs: Stage III, Stage IV, CD4 count < 200/mm³, Stage II with TLC < 1200/mm³, Tuberculosis, Transfer-in

Outcome (provide dates when change from alive)					Of those alive			Ambulant		At work or school		Drug adherence > 95%	
Alive	Dead	Default	Stop	Transfer	Start	Substitute	Switch	Yes	No	Yes	No	Yes	No
X					X			X		X			
X					X			X		X			
X					X			X			X		
	X date				X				X		X		

Alive - alive and on ARV drugs: Dead - whatever the cause: Default - not seen in three months:

Stop - stopped treatment due to side effects/other:

Transfer - transfer-out to another ARV treatment unit

Start - on first line regimen: Substitute - changed to alternative first line regimen: Switch - changed to second line regimen

Ambulant - yes/no: At work or school - at previous or new employment for adults

Adherence > 95% - pill counts of 8 tablets or less when patient comes for review

ARV Patient Master card



*Every 3 months update the register
from the master card data*

ARV Patient Register



*Every 3 months perform
quarterly cohort analysis from
updated register*

ARV Patient Cohort Analysis

National Data Collection

Manual and done through site visits:

- July – September 04, NTP did M&E for the previous quarter
- October – December 04, NTP did M&E for the previous quarter
- January to March 05, HIV Unit did supervision and M&E for the previous quarter
- April to June 05, HIV Unit did supervision and M&E for the previous quarter

The Progress made!

The Process of Scaling up ARV therapy

- 59 facilities selected for ART scale up
- All facilities briefed in March 2004
- Training module developed by April 2004
- National training programme implemented from May 2004 onwards
- Facility assessments started second six months of 2004 and completed by end of the year

Training on ARV therapy:

Public sector:

- Classroom training for clinicians and nurses (combined) for 5 days +
- Attachments for clinicians and nurses at experienced sites for 2 weeks

Private sector:

- Classroom training for clinicians and nurses (combined) for 2 days

Numbers trained in ARV therapy: up to June 20th, 2005

Public sector

- **836 staff (doctors, clinical officers and nurses)** have attended classroom training and passed the formal examination and **213 staff** have undertaken a successful attachment from 59 facilities

Private sector

- **195 staff (doctors, clinical officers and nurses)** have attended classroom trainings and passed the formal examination from 77 hospitals/clinics

Readiness to start ART

- Structured assessment by HIV Unit – takes ½ day per site
- By December 2004, 59 facilities had been assessed and 47 were ready to start
- By March 2005, all 59 facilities were ready to start

Progress in delivering ARV therapy in public sector

- December 31, 2002:
3 sites – **1200** patients started on ART
- December 31, 2003:
9 sites – **4000** patients started on ART
- December 31, 2004:
24 sites – **13,183** patients started on ART
- March 31, 2005:
34 sites – **17,600** patients started on ART

**ARV THERAPY IN MALAWI
UP TO MARCH 2005**

Sites providing ART up to December 2004

- 34 hospitals or clinics:-
 - 23 providing through GFATM
 - 3 army hospitals through MDF
 - 7 mission hospitals through donations
 - 1 district hospital through MSF-Greece
- All hospitals using national systems for registration and recording

Patients started on ART (1)

Quarter: Jan-Mar 2005

- 4530 cases
- Males 38%
- Females 62%
- Adults 95%
- Children 5%

Cumulative:

- 17601 cases
- Males 39%
- Females 61%
- Adults 95%
- Children 5%

Patients started on ART (2)

Quarter: Oct-Dec

- Stage III 66%
- Stage IV 24%
- Low CD4 count 10%

- [TB 14%]

Cumulative:

- Stage III 55%
- Stage IV 23%
- Low CD4 count 22%

- [TB 13%]

Type of patient starting ART

Assessed in 7420 patients with cumulative analysis from 29 hospitals

- Housewives 23%
- Business 16%
- Farmers 14%
- Teachers 7%
- Soldiers and police 4%
- Health care workers 3%
- Other jobs 27%

Outcomes (cumulative analysis)

- Number ever started on ART 17,601
- Alive and on ART 81%
- Dead 8%
- Defaulted (loss to follow-up) 7%
- Stopped treatment 1%
- Transfer out 2%

Of those dying on ART:-

- Dying in first month 36%
- Dying in second month 24%
- Dying in third month 15%

[Dying in first 3 months 75%]

- Dying in month 4 or later 25%

Of those alive and on ART

- First line regimen 94%
- Alternative first line regimen 5%
- Second line regimen 1%

Of those alive and on ART:

n = 14298

- **Ambulatory** **98% (10245)**
- **Fit to work** **91% (10004)**
- **Side effects** **10% (7337)**
- **Drug adherence > 95%** **95% (10768)**

Outstanding Issues:

- Pathways to ART and drop-outs
- Gender differences
- Few patients with TB starting ART
- Few children starting ART
- Reasons for early death rates
- ARV pills when patients have died
- Second-line therapy

Challenges

- Human resource issue
- Uninterrupted drug supplies
- Monitoring and evaluation
- Need to decentralise treatment