



**Government of Malawi  
Ministry of Health**

**Quarterly HIV Programme Report**

*HIV Testing and Counseling*

*Prevention of Mother to Child Transmission*

*Antiretroviral Therapy*

*Treatment of Sexually Transmitted Infections*

**January – March 2010**

## HIV TESTING AND COUNSELLING - HTC

### QUARTERLY REPORT

**JANUARY – MARCH 2010**

#### **1. Number of people Tested and Counseled for HIV from January to March 2010. .**

The total number of people tested for the quarter was 416,370. See Table 1 below. The total number tested for the quarter was more than the October – December quarter by 3%. The HIV positive rate for all people tested and counseled dropped by 1% from 11.8% in October –December 2009 to 10.8% in January – March 2010 quarter. The Southern Region contributed 42%, the Central 43.7% and the Northern Region 14.2% of all people tested. Males were 33.7%, females non-pregnant were 37% and females pregnant were 29.3%.

The number of people tested and counseled as partners was 11.8%, showing no improvement compared with previous quarters. The percentage of people testing for the first time in their lives was 54.1% and this rate of people testing for the first time is remaining stagnant from July 2009 at slightly above 50%.

**Table 1. Number of people tested and counseled for HIV**

	Indicator	January – March 2010	
		Total	%
<b>1</b>	Number tested and counseled for HIV	<b>416,370</b>	
<b>2</b>	# and % HIV positive	4,2894	<b>10.3%</b>
<b>2[a]</b>	# Tested for <i>Northern Region</i> and % HIV +	59,177	6.3%
<b>2[b]</b>	# Tested for <i>Central Region</i> and % HIV +	181,780	7.9%
<b>2[c]</b>	# Tested for <i>Southern Region</i> and % HIV +	175,413	14.0%
<b>3</b>	# tested and % of exposed children [0-17months testing positive with rapid HIV Tests]	6,086	18.3%
<b>4</b>	# and % of Males	139,163	33.4%
<b>5</b>	# and % of Non-Pregnant Females	158,986	38.2%
<b>6</b>	# and % of Pregnant Females	118,221	28.4%
<b>7</b>	# and % Never tested before	225,396	54.1%
<b>8</b>	# and % tested and counseled with a partner	48,993	11.8%
<b>9</b>	# and % of Age Group A [0-17months] tested and parents/guardians counseled.	6,086	1.4%
<b>10</b>	# and % of Age Group B [18 months- 14 yrs] tested and counseled.	29,651	7.1%
<b>11</b>	# and % of Age Group C [15 – 24 yrs] tested and counseled.	164,614	39.5%

	Indicator	January – March 2010	
		Total	%
12	# and % of Age Group D [25 years and above] tested and counselled.	216,197	51.9%
13	# referred for ART and % for all referrals	31,807	54.7%
14	# referred for TB and % for all referral	1,853	3.2%
15	# referred for PMTCT and % for all referrals	12,831	22.0%
16	# referred to other Services and % for all referrals	11,714	20.1%
17	Total # referred and % referred for all tested and counselled	58,205	14.0%
18	# of cumulative HTC static sites operating by end of March 2010	<b>735</b>	

## **2. Number of HTC static sites.**

The number of cumulative HTC static sites reported through DHOs quarterly reports by end of March 2010 was 735, an increase of seven sites from December 2009. It should be noted that central hospitals, district and community hospitals and some big CHAM facilities are counted as operating one HTC static site, whilst in reality these institutions have more than one site operating in their premises.

The number of outreach HTC sites operated during the quarter was 387.

## **3. Develop Human Resource Capacity for Delivery of HTC Services**

### ***3.1 HTC Training.***

From January to March there were 248 counsellors trained and certified by NGOs and DHOs. The cumulative HTC counsellors trained and certified from 2004 to end of March 2010 is now 4,086. This excludes health care workers trained in HTC as an integrated component in PMTCT training.

### ***3.2 Orientation of HTC Trainers in Couple HIV Testing and Counselling [CHTC].***

47 HTC Trainers were given a two day orientation in CHTC. 27 of these were from the Southern region and were given the orientation at Mpemba Training Centre in Blantyre from 4<sup>th</sup> to 5<sup>th</sup> February; and 20 were from the Central and Northern region and were given the orientation at Nathenje in Lilongwe Rural from 8<sup>th</sup> – 9<sup>th</sup> February.

### **3.3 TOT HTC**

A TOT was held from 15<sup>th</sup> – 26<sup>th</sup> March in Mponela. 23 participants attended the training and 20 were successful and were certified. The cumulative number of HTC trainers is now 121.

### **3.4 Refresher Training.**

40 HTC trainers received week-long refresher training. This was supported by World Vision International.

### **4. HTC Quarterly Supervision.**

Three teams from the central level, assisted by zonal health staff, i.e. zonal HTC supervisors and zonal laboratory technicians, visited all districts for HTC supervision and monitoring from 15<sup>th</sup> to 26<sup>th</sup> February.

### **5. National Evaluation of the National HTC Week Campaign.**

The HTC Week Task Force met on the 14<sup>th</sup> January and the draft report was presented by the consultants. After lengthy discussions, a number of areas were identified as needing additional input from the consultants. The consultants made additional inputs and the report was finalized on 16<sup>th</sup> February. Forthcoming activities on this activity are:

- presentation of this report to MOH Senior Management Meeting for a decision on the way forward with this activity, and
- printing and dissemination of the report

### **6. PITC Study Tour**

Two teams, each composed of 6 MOH senior personnel and MOH partners, were on a PITC Study tour to Uganda and Tanzania from 1<sup>st</sup> – 4<sup>th</sup> March 2010. The study tour was funded by CDC-Malawi.

### **7. Review of HTC Supervision Tools – 18 – 19 January**

A two day workshop was held in Blantyre with HTC trainers and HTC district supervisors to review national HTC Supervision tools.

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# MALAWI PMTCT PROGRAMME

## QUARTERLY REPORT

### JANUARY TO MARCH 2010

## 1 Executive Summary

Between January and March 2010, 454 facilities in Malawi were providing PMTCT services at ANC and/or maternity. 6,895 (74%) of 9,286 women attending ANC who were known to be HIV positive received ARVs. This represents 38% PMTCT coverage among the estimated 18,210 HIV positive pregnant women in Malawi during this quarter. 5,840 (92%) of infants born to known HIV infected mothers at maternity received ARV prophylaxis. This represents 32% PMTCT coverage among the estimated 18,210 HIV exposed infants born in Malawi during this quarter.

The national data from ANC and maternity are presented in 2 tables in the appendix.

## 2 Methods

New integrated M&E tools for ANC and maternity were implemented in Malawi in January 2010. These tools consist of a set of clinic registers and reporting forms that fully integrate patient management information as well as all relevant data elements for M&E of the maternal and child health and PMTCT programs.

The full data set from ANC and maternity (including reproductive health indicators) is shown in the tables in the appendix; however, this report focuses only on the data that are relevant for the PMTCT programme.

The new ANC register was specifically designed to avoid data duplication that previously affected PMTCT reports from ANC due to the inability to account for individual women's outcomes in the course of multiple visits. The new system aggregates women's outcome data after they have completed their ANC visits. However, this first quarterly report from the new tools is only based on data from first ANC visits. It is therefore likely that the final HIV testing and ARV coverage at ANC will be slightly higher than shown in this preliminary report as women who will receive these services at subsequent visits are counted as not covered. Full ANC reports will be available from July 2010.

Data was entered in the register as the service was provided. Monthly facility reports were compiled and forwarded to the district health offices who compiled quarterly districts reports. As the tools have just been introduced, 5 workshops with service providers were conducted in order to support all district teams in the compilation and cleaning of their data. All data was entered into an access data base at the Department for HIV and AIDS.

Unlike in the past, data from ANC and maternity were collated and presented separately. This was done because the records do not identify the women individually hence are subject to double counting if not separated.

Coverage was calculated by dividing the number patients served by population denominators. The denominators were derived from expected pregnancies based on population projections and HIV prevalence from epidemiological surveillance.

Estimated national coverage for PMTCT is based on the reported number of women receiving ARVs at ANC. This follows WHO recommendations for countries with high rates of ANC attendance and lower rates of facility deliveries.

## 3 Results

### 3.1 PMTCT Sites

The number of facilities providing PMTCT services in the quarter is defined through reported performance of *PMTCT signal functions* within maternal and child health services. For this quarter, only ANC and maternity services have been considered as there is no standard PMTCT monitoring system for under 5 clinics in place yet. During quarter 1 2010, there were **454** facilities that had provided ARVs for at least one HIV infected woman at ANC and/or one woman and her infant at maternity.

### 3.2 ANC

Between January and March 2010, **141,410** women attended ANC for their first visit. This is equivalent to **93%** of the expected 151,750 pregnant women in the population during the quarter, indicating near completeness of reporting considering that 93% of pregnant women attend ANC in Malawi (2004 DHS). **13,379 (9%)** of women started ANC in their first trimester. **20,912 (15%)** of women were tested for syphilis at ANC and **1,588 (8%)** were syphilis positive.

#### 3.2.1 HIV Testing

**103,231 (74%)** of ANC attendees had their HIV status ascertained. Out of these, **8,199 (8%)** presented with a valid documented previous HIV test result and **95,032 (92%)** received a new HIV test result at ANC. A total of **9,286 (9%)** women were HIV positive. The **103,231** women whose HIV status was ascertained at ANC represent **68%** of the expected 151,750 pregnant women in the population.

#### 3.2.2 ARV Coverage

**6,895 (74%)** of HIV infected women attending ANC received maternal ARVs. This represents **38%** coverage of the estimated 18,210 HIV positive pregnant women in the population in this quarter (12% of 151,750).

Of the 6,895 women who received any ARVs, **2,894 (42%)** were given a single tablet of nevirapine to take home and **2,657 (39%)** were started on AZT combination regimen.

5,338 (57%) of 9,286 HIV positive women were assessed for ART eligibility through a CD4 count and/or WHO clinical staging, or by the fact that they were already on ART. 2,116 (40%) were found eligible and 1,344 were on ART as of the first ANC visit. This represents **15%** ART coverage of the estimated 9,105 pregnant women eligible for ART in the population.<sup>1</sup>

**8,069 (87%)** of HIV infected women at ANC were on Cotrimoxazole Preventive Therapy.

**1,175 (13%)** of HIV infected women attending ANC received the infant dose of ARVs (single dose nevirapine syrup) to take home.

### 3.3 Maternity

Between January and March 2010, **78,278** women were admitted for delivery to maternity. This is equivalent to **52%** of the expected 151,750 deliveries in the population during the quarter. Out of all admissions, 74,441 (95%) delivered at the facility, while 3,576 (5%) had already delivered before reaching the facility. This indicates some incompleteness of reporting from maternity during this quarter, given that 57% of births are expected to take place at health facilities in Malawi (2004 DHS).

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<sup>1</sup> About half all HIV positive pregnant women in Malawi are estimated to have a CD4 count <350 cells/mm<sup>3</sup> and are therefore eligible for ART.

A total of 78,302 babies were born, 75,988 (97%) were singletons and 2,314 (3%) were twins/multiples. There were 76,883 (98%) live births and 1,453 (2%) stillbirths. 76,053 (99%) of babies born alive were discharged alive and 830 (1%) died before discharge.

### 3.3.1 HIV Testing

74,842 (90%) women had their HIV status ascertained at maternity. Out of these, 69,152 (92%) presented with a valid previous HIV test result and 5,690 (8%) received a new HIV test result. A total of 6,872 (9%) women were HIV positive and 67,970 (91%) were negative. The 78,842 women whose HIV status was ascertained at maternity represent 49% of the expected 151,750 women delivering in the population.

HIV exposure status was ascertained for 70,567 (93%) out of 76,053 babies born and discharged alive. 6,320 (9%) were born to a known HIV positive mother.

### 3.3.2 ARV Coverage

A total of 5,624 (82%) of HIV infected women attending maternity received ARVs during labour. Out of these, 2,399 (43%) received the labour dose of AZT combination regimen, 1,750 (31%) received single dose nevirapine and 1,475 (26%) were on ART. 4,098 (60%) women were already taking ARVs during pregnancy: 2,306 (56%) of these were on AZT combination regimen and 1,792 (44%) were on ART (lifelong triple therapy). AZT and ART should be taken for more than 4 weeks during pregnancy to ensure optimal effectiveness. 1,422 (62%) of women on AZT and 1,574 (88%) of women on ART had received the respective regimen for over 4 weeks during pregnancy.

A total of 5,840 (92%) of infants who were known HIV exposed and discharged alive received ARV prophylaxis at maternity. This represents 32% coverage of the estimated 18,210 HIV exposed infants born in the population in this quarter (12% of 151,750). 1,722 (29%) HIV exposed infants received single dose nevirapine and 4,118 (71%) started AZT combination regimen. 2,899 (70%) of infants on AZT combination regimen received nevirapine + AZT syrup and 1,219 (30%) received only AZT syrup.

## 4 Trainings

A total of 150 existing PMTCT providers from Ntchisi, Nsanje and Nkhotakota received further training in Paediatric HIV during quarter 1 2010.

## 5 Supervision

Structured supervision visits were conducted to PMTCT sites in the central and southern region between 8<sup>th</sup> and 26<sup>th</sup> of March 2010. Key observations from site supervision include:

- Staff at ANC and maternity had preformed very well in filling the new registers. More support was needed with aggregation of data and filling of the monthly report forms.
- Following national policy, the new Women's Health Passports were being distributed free of charge at the majority of sites. However, some sites (e.g. in Machinga) were still charging the nominal fee for health passports. This was addressed and rectified during supervision.
- There were stock-outs of HIV test kits at many sites. This was due to the delayed arrival of test kits in the country, aggravated by problems in the supply chain through central and regional medical stores to district pharmacies.
- While there were sufficient stocks of ARVs for PMTCT in country, similar problems in the supply chain through CMS resulted in complete stock outs at many facilities.

## 6 Comments

The ascertainment of HIV status for PMTCT has reached high levels in Malawi: 90% of women attending maternity had their HIV status ascertained and 92% of these presented with a valid previous HIV test result (presumably mostly from ANC). However, the recorded PMTCT coverage at the population level has been below expectations during this quarter. The actual PMTCT population coverage may be somewhat higher as there was some evidence for incomplete reporting from maternity. In addition, ANC data in this quarter were only based on women's status at their first visit and it is likely that further women access HIV testing and ARV prophylaxis during subsequent visits. Data covering all subsequent visits will be available from July 2010.

Overall, the PMTCT program has experienced several challenges during this quarter:

There were wide-spread stock-outs of HIV and syphilis rapid test kits and ARVs and these shortages of supplies are probably the main reason for the sub-optimal PMTCT coverage recorded during this quarter.

Inadequate coverage at the population level may also be explained by the cascading losses of women in need of PMTCT when accessing services (women in the population > those attending MCH services > those getting HIV tested > those receiving ARVs). This is a main constraint for PMTCT interventions delivered at maternity due to the low proportion of facility deliveries in Malawi.

The proportion of HIV positive women at ANC (9%) and maternity (9%) is lower than the estimated 12% HIV positive pregnant women in the population. This may be related to sub-optimal sensitivity of HIV rapid testing at ANC. Quality assurance methods for HIV testing are currently being strengthened to address these concerns.

There was some evidence for confusion among providers regarding the protocols (or the documentation) for AZT combination regimen and ART at maternity. Infants whose mothers were on AZT combination regimen should receive a single dose of nevirapine syrup and start daily AZT syrup for either 1 or 4 weeks, depending on the duration of AZT taken during pregnancy. Infants born to mothers on ART should only start AZT and not receive additional nevirapine syrup. However, 4,118 infants received AZT combination regimen while only 3,874 mothers were receiving AZT or ART during labour. 1,219 infants received AZT syrup only while 1,475 mothers were on ART during labour. Some of these differences may be explained by increased rates of stillbirths and neonatal deaths among HIV infected mothers.

The department alongside other partners are working at improving on these service delivery bottlenecks in order to address the situation.

# 2010 Q1 ANC Report

## Facility Data

## National coverage

## Indicator

Population denominator

Total women attending first ANC	141,410		151,750	93%	PMTCT 5
<b>Trimester of first visit</b>					
First visits at 0-12 weeks	13,379	9%			
First visits at >12 weeks	128,031	91%			
<b>Tetanus toxoid doses received</b>					
0-1	93,006	66%			
2 or more	48,404	34%	151,750	32%	
<b>SP doses received</b>					
None	51,588	36%			
Any	89,822	64%	151,750	59%	
<b>Iron and folate tablets received</b>					
0-119 tabs	133,203	94%			
120 or more tabs	8,207	6%	151,750	5%	
<b>Syphilis status</b>					
Total women not tested for syphilis	120,498	85%			
Total women tested for syphilis	20,912	15%	151,750	14%	
Syphilis negative	19,324	92%			
Syphilis positive	1,588	8%			
<b>HIV status</b>					
Total women with unknown HIV status	37,196	26%			
Total women with ascertained HIV status	103,231	74%	151,750	68%	
Total women with valid previous result	8,199	8%			PMTCT 6
Negative	5,781	71%			
Positive	2,418	29%			PMTCT 7
Total women newly tested at ANC	95,032	92%			PMTCT 8
Negative	88,164	93%			
Positive	6,868	7%			PMTCT 9
Total women HIV negative	93,945	91%	133,540	70%	
Total women HIV positive	9,286	9%	18,210	51%	PMTCT 10
<b>ART eligibility among HIV positive women</b>					
Total women with unknown ART eligibility	3,955	43%			
Total women assessed for ART eligibility	5,338	57%			PMTCT 11
ART not eligible	3,222	60%			
ART eligible	2,116	40%			PMTCT 12
<b>CPT coverage among HIV infected women</b>					
Not on CPT	1,217	13%			
On CPT	8,069	87%	18,210	44%	PMTCT 17
<b>ARV regimen among HIV infected women</b>					
Total women receiving no ARVs	2,391	26%			
Total women receiving ARVs	6,895	74%	18,210	38%	PMTCT 16
ART (1)	1,344	19%	9,105	15%	PMTCT 13
Single dose NVP	2,894	42%			PMTCT 14
AZT combination regimen	2,657	39%			PMTCT 15
<b>ARVs dispensed for infant dose</b>					
ARVs not dispensed	8,111	87%			
ARVs dispensed	1,175	13%	18,210	6%	PMTCT 18

(1) National coverage is calculated for 50% of HIV infected pregnant women (as 50% of HIV infected pregnant women are assumed to have a CD4 count <350 and are therefore eligible for ART)

# 2010 Q1 Maternity Report (Page 1)

	Facility Data	National coverage	<i>Indicator</i>	
		Population denominator		
Total women attending Labour & Delivery	78,278	151,750	52%	<i>PMTCT 19</i>
Total admissions to Labour & Delivery (1)	83,359			
<b>HIV status</b>				
Total women with unknown HIV status	8,517			
Total women with ascertained HIV status	74,842	151,750	49%	
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Total women with valid previous result	69,152			<i>PMTCT 20</i>
Negative	62,843			
Positive	6,309			<i>PMTCT 21</i>
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Total women newly tested at maternity	5,690			<i>PMTCT 22</i>
Negative	5,127			
Positive	563			<i>PMTCT 23</i>
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Total women HIV negative	67,970	133,540	51%	
Total women HIV positive	6,872	18,210	38%	<i>PMTCT 24</i>
<b>ARVs during pregnancy among HIV positives</b>				
Total women receiving no ARVs	2,774			
Total women receiving ARVs	4,098	18,210	23%	
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AZT combination regimen	2,306	18,210	13%	
AZT <4 weeks	884			
AZT ≥4 weeks	1,422			
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ART (triple therapy)	1,792	18,210	10%	
ART <4weeks	218			
ART ≥4 weeks	1,574			
<b>ARVs received during labour among HIV positives</b>				
Total women receiving no ARVs	1,248			
Total women receiving ARVs	5,624	18,210	31%	<i>PMTCT 28</i>
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ART	1,475	18,210	8%	<i>PMTCT 27</i>
Single dose NVP	1,750	18,210	10%	<i>PMTCT 25</i>
AZT combination regimen	2,399	18,210	13%	<i>PMTCT 26</i>
<b>Obstetric complications</b>				
Total women with no complications	76,181			
Total women with complications	7,178			
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Haemorrhage	1,385			
Obstructed / prolonged labour	1,904			
(pre-) Eclampsia	365			
Maternal sepsis	250			
Ruptured uterus	138			
Other maternal complications	3,136			
<b>Referred out before delivery</b>				
No	78,278			
Yes	5,083			
<b>Staff conducting delivery</b>				
MO, CO, nurse/midwife, MA	73,886	151,750	49%	
PA, WA, HSA	866			
Other	3,313			
<b>Mother survival</b>				
Discharged alive	77,490			
Died	636	76,883	827	<i>MMR (2)</i>

(1) Total admissions are subject to double counting of women referred out before delivery

(2) Maternal mortality ratio for facility deliveries (per 100,000 live births)

Population denominator

Twins					
Total babies born	78,302		151,750	52%	
Singleton babies	75,988	97%			
Twin / multiple babies	2,314	3%			
Delivery place					
Total deliveries at a health facility	74,441	95%	151,750	49%	
This facility	73,947	99%			
Other facility	494	1%			
Total deliveries before reaching the facility	3,576	5%			
In transit	1,916	54%			
Home / TBA	1,660	46%			
Delivery mode					
Spontaneous vaginal	71,620	92%			
Vacuum extraction	962	1%			
Breech	1,436	2%			
Caesarean section	4,075	5%	151,750	3%	
Infant complications					
Total infants with no complications	70,072	89%			
Total infants with complications	8,230	11%			
Prematurity	2,487	30%			
Low birth weight (<2500g)	2,623	32%			
Asphyxia	1,361	17%			
Newborn sepsis	854	10%			
Other infant complications	905	11%			
Infant survival					
Total live births	76,883	98%			
Discharged alive	76,053	99%			
Neonatal deaths	830	1%			
Stillbirths	1,453	2%			
Fresh	749	52%			
Macerated	704	48%			
Infant HIV exposure and ARV prophylaxis					
Infants with unknown HIV exposure status	5,486	7%			
Infants with known HIV exposure status	70,567	93%	151,750	47%	
Infants not HIV exposed	64,247	91%			
Infants HIV exposed	6,320	9%	18,210	35%	PMTCT 29
Received no ARVs	480	8%			
Received any ARVs	5,840	92%	18,210	32%	PMTCT 32
Single dose NVP	1,722	29%	18,210	9%	PMTCT 30
AZT prophylaxis	4,118	71%	18,210	23%	PMTCT 31
Started AZT + sd NVP	2,899	70%	18,210	16%	
Started AZT only	1,219	30%	18,210	7%	
Breast feeding initiated					
No	3,781	5%			
Yes	74,394	95%			

# Malawi Antiretroviral Treatment Programme QUARTERLY REPORT Results up to 31st March 2010

## Executive Summary

By the end of March 2010, **211,246** patients were alive and on ART, equivalent to **55%** coverage of the estimated 383,897 population in need of ART in Malawi <sup>1</sup>. There were **371** ART clinics (**288** static and **83** outreach / mobile clinics).

Out of the **289,388** patients ever initiated on ART, **211,246** (73%) were retained alive on ART, **33,989** (12%) had died, **42,995** (15%) were lost to follow-up (defaulted) and **1,209** (<1%) were known to have stopped ART. **78%** of adults and **81%** of children were retained alive on ART 12 months after ART initiation. An estimated **192,603** adults and **18,643** children (<15 years) were alive on ART by the end of March 2010.

In the first quarter of 2010 (January to March) a total of **18,485** new patients initiated ART. **4,599** ART patients transferred between clinics (20% of the total **23,127** new ART clinic registrations). Among new registrations 40% were male, 60% female; 90% were adults and 10% children.

The number of infants starting ART in the fourth quarter of 2009 in WHO stage 1 or 2 with confirmed HIV infection (DNA-PCR) decreased from **163** to **131**, while children under 18 months starting due to presumed severe HIV disease increased from **127** to **139**.

The delayed release of funds in 2009 has continued to affect the supply chain for ARVs during quarter 1 2010, as drugs continued to arrive late and in small batches, requiring several rounds of distribution and re-location of remaining stocks. An emergency order of 500,000 tins of first line regimen is scheduled to arrive before mid July to boost national stocks before arrival of the next scheduled consignment in August 2010.

In June 2010, MOH endorsed a change in PMTCT and ART policy, preparing the way for a revision of national guidelines. Work on the new guidelines continues and implementation is scheduled for July 2011.

**Table 1: ART programme resume 2003-2009 (public and private sector)**

	Dec 2003	Dec 2004	Dec 2005	Dec 2006	Dec 2007	Dec 2008	Dec 2009	Mar 2010
ART sites	9	24	83	141	163	221	377	371
Patients alive on ART	No data	10,761	29,087	59,980	100,649	147,497	198,846	211,246
Coverage of pop. in need of ART <sup>1</sup>	No data	3%	9%	17%	28%	41%	53%	55%
New ART registrations in year	No data	10,183	25,634	46,351	61,688	76,581	88,126	23,127
Cumulative registrations	~3,000	13,183	38,817	85,168	146,856	223,437	312,476	335,498

<sup>1</sup> ART need defined by CD4<250 cells/mm<sup>3</sup>

## Methods

This report includes quarterly data from all patients who registered at ART clinics in Malawi between January and March 2010 and cumulative data from all patients who ever registered up to 31<sup>st</sup> March 2010.

All health facilities with static ART clinics in the public and private sectors were visited during April / May 2010. Data collected cover all 288 static and 83 outreach / mobile ART sites. The majority of facilities were using the standard national monitoring & evaluation tools (paper-based or electronic data system); some NGO supported sites were using custom tools compatible with the national standard reporting requirements.

**36 ART supervisors** (MOH Department of HIV and AIDS staff, experienced ART clinic staff from the districts, MBCA and NGO partners) in 10 teams spent a total of **705 working hours** at the sites, each visit lasting an average of 2½ hours, but up to 2 full days at the busiest sites. Structured supervision included:

- Quality assessment of service provision
- M&E data verification
- Drug stock-level assessment
- Patient chart review, clinical mentoring for irregular and complex cases

M&E data were collected from the patient master cards and the ART Registers. Much effort was made to ensure that registration data and treatment outcomes (particularly death and defaulter) were correct, and we believe that outcomes are accurately represented in this report. Certificates were awarded to clinic teams with excellent performance during the previous supervision visit.

All data were entered into an MS Access data base at the Department for HIV and AIDS. ART coverage was calculated from ART program data and epidemiological projections for the population in need of ART. Projections were based on HIV prevalence using EPP and Spectrum and assuming ART eligibility from a CD4 count <250 cells/mm<sup>3</sup>.

## Results

National data for quarterly and cumulative ART data are summarized in 2 tables in **Annex 1**.

### Access to ART

By the end of March 2010 there were **371 ART delivery sites** in Malawi, owned by government, mission, NGOs and the private sector. **55** of these were ART facilities in the private sector, charging a nominal MK500 per monthly prescription of drugs per patient.

### New patients registered between January and March 2010

In Q1 2010, there were a total of 23,127 ART clinic registrations, representing **18,485** (80%) patients who newly initiated ART and 4,599 (20%) ART patients who transferred between clinics. Out of all clinic registrations, 40% were males and 60% were females, 90% were adults and 10% were children (<15 years). The majority of patients (**55%**) started ART in WHO Stage 3. The proportion of patients starting in Stage 1 or 2 with a low CD4 count (**32%**) has slightly decreased from the previous quarter while the proportion of patients in stage 4 remained similar at 11%. 1% were infants with confirmed HIV infection (DNA-PCR) and 1% started due to other reasons. **1,190 (5%)** of patients registered during Q1 2010 were pregnant women (at the time of ART initiation).

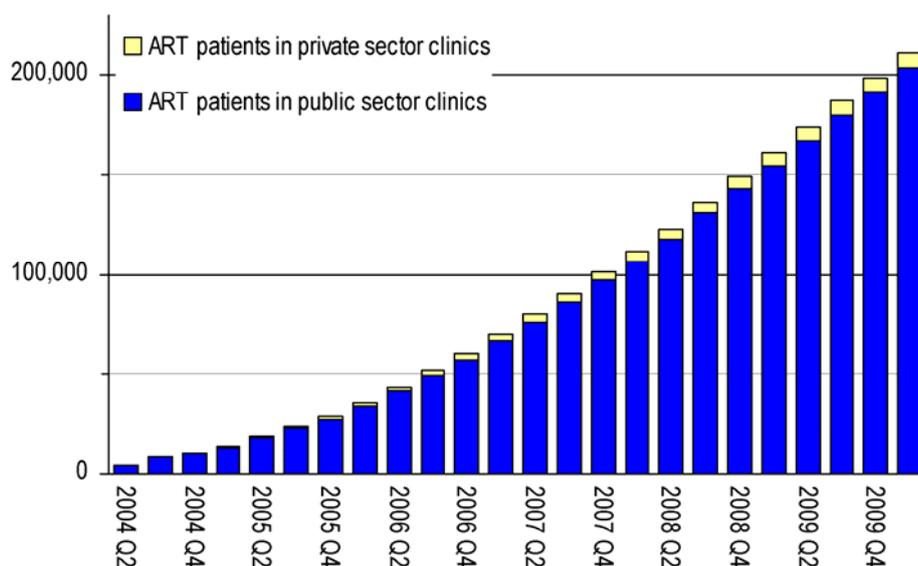
### Cumulative patients ever registered up to March 2010

By the end of March 2010, there were a cumulative total of 335,498 clinic registrations, representing **289,388** (86%) patients who newly initiated ART and 46,059 (14%) ART patients who transferred between clinics. Out of all clinic registrations, 39% were males and 61% were females, 91% were adults and 9% were children (<15 years). Private sector clinics accounted for **12,604** (3.8%) of total patient registrations.

## Treatment Outcomes

By the end of March 2010, a total of **211,246 patients** were alive and on ART. This number includes 4,441 patients who were assumed to be 'in transit' as of the 31<sup>st</sup> March 2010, based on the difference between 50,500 patients *transferred out* and 46,059 patients *transferred in* at the facilities around the country. This difference is explained by patients registered as a *transfer out* in the last 2 months of the quarter who have not yet arrived at their new site by the end of the quarter.

**Figure 1: Patients alive on ART in public and private sector clinics in Malawi**



**Figure 1** shows the increase of patients alive on ART by the end of each quarter. The number of patients alive on ART increased by **12,400** in Q1 of 2010. This growth has been very consistent over time allowing for reliable forecasting and quantification. Implementation of revised PMTCT and ART guidelines in 2011 is expected to accelerate ART access, putting more strain on human and financial resources.

**Table 2:**

ART coverage among adults and children in the 5 Zones. Proportion of the population in need of ART who were alive on ART at the end of 2010 Q1 (ART need based on SPECTRUM projection CD4<250)

Zone	Adults (15 yrs and older)			Children (<15 years)			All ages		
	ART need	On ART	Cov.	ART need	On ART	Cov.	ART need	On ART	Cov.
<b>N</b>	24,856	22,061	<b>89%</b>	5,865	2,076	<b>35%</b>	30,721	24,137	<b>79%</b>
<b>CW</b>	65,006	43,119	<b>66%</b>	15,339	4,345	<b>28%</b>	80,345	47,464	<b>59%</b>
<b>CE</b>	19,447	18,418	<b>95%</b>	4,588	1,453	<b>32%</b>	24,035	19,871	<b>83%</b>
<b>SW</b>	96,874	69,608	<b>72%</b>	22,859	7,095	<b>31%</b>	119,733	76,703	<b>64%</b>
<b>SE</b>	104,423	39,397	<b>38%</b>	24,640	3,674	<b>15%</b>	129,063	43,071	<b>33%</b>
<b>Nat. Total</b>	310,606	192,603	<b>62%</b>	73,291	18,643	<b>25%</b>	383,897	211,246	<b>55%</b>

**Table 2** shows the **national ART coverage** at the end of March 2010: 211,246 (55%) of 383,897 population in need were on ART. Coverage by geographical zone was inversely related to the absolute population in need of ART: 19,871 (83%) of 24,035 people in need of ART in the **Central East Zone** were on ART, while only 43,071 (33%) of 129,063 people in the **South East Zone** were covered. Coverage among children and adults was 25% and 62%, respectively. The high estimated coverage in the Central East and Northern Zone was probably due to patients who are regular residents elsewhere, but who are accessing ART in these zones (for confidentiality, as migrant workers, patients from neighbouring countries, etc.).

**Figure 2:** ART coverage by Zone. Proportion of the population in need of ART who were alive on ART at the end of the quarter (ART need based on SPECTRUM projection CD4<250)

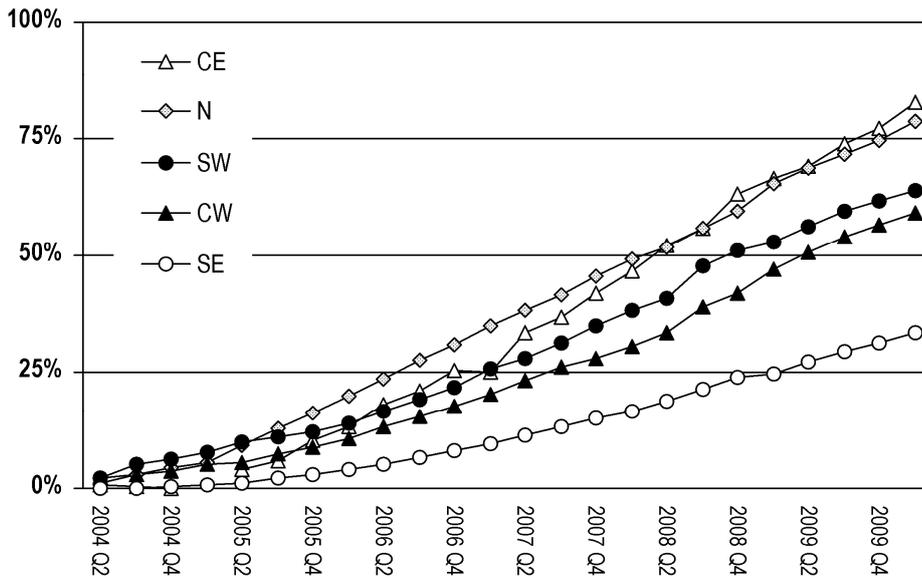


Figure 2 shows that ART coverage has increased much faster in the Central East and Northern Zone than in the South East Zone. There is an indication that the increase in coverage in the Central West and South West Zones may have started to slow down.

**Figure 3: Quarterly rates of ART drop out (ART stop, defaulters and deaths)**

Numerator: new ART stops, new defaulters and new deaths in the respective quarter  
Denominator: total patients retained alive at the end of the previous quarter plus new patients registered in the respective quarter)

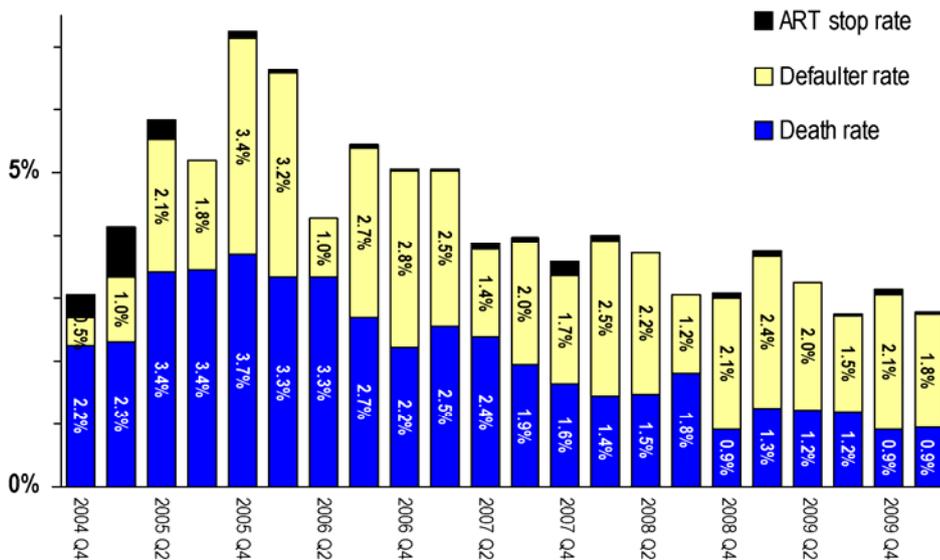
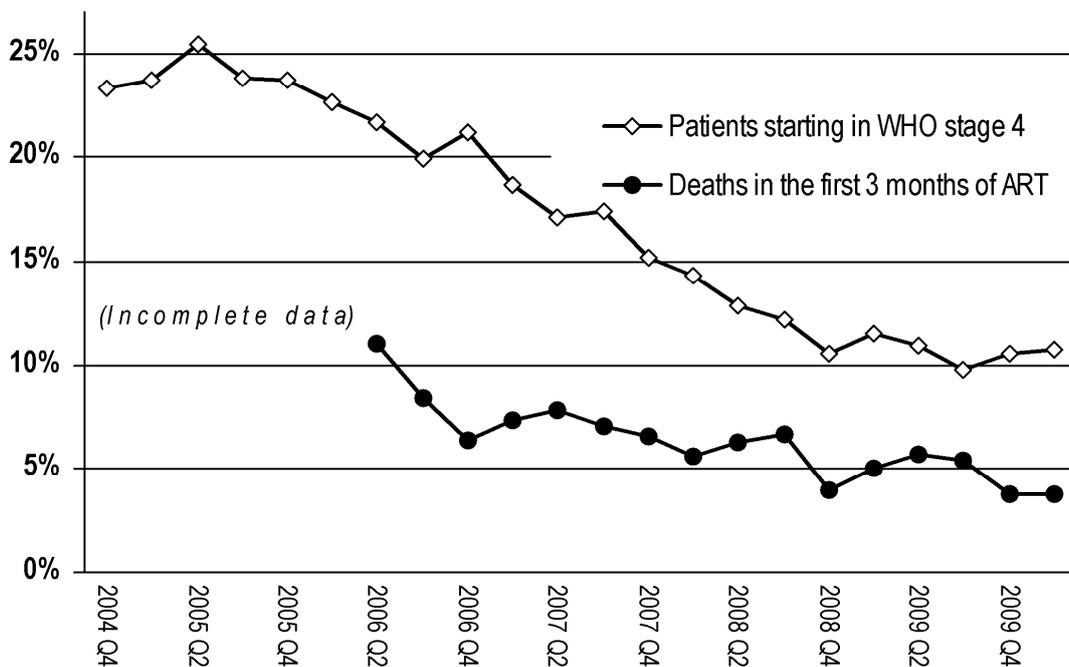


Figure 3 shows the general steady decrease of death and defaulter rates since the start of the national programme. During Q1 2010, there were 1,981 new deaths, 3,880 new defaulters and 73 new ART stops. This translates into a quarterly death rate of 0.9% and a defaulter rate of 1.8% among the patients alive and on treatment during this quarter. By end of March 2010, a cumulative 33,989 (12%) patients were known to have died,

42,995 (15%) were lost to follow-up/defaulted, and 1,209 (<1%) were known to have stopped ART. Based on previous operational studies, about half of the patients classified as lost to follow-up are thought to have died.

Early mortality has declined considerably (Figure 4). In 2006 Q2, 11% of new patients died within the first 3 months after ART initiation. Early mortality has declined to less than 4% in Q1 2010. This correlates well with the decline in the proportion of patients starting ART in WHO clinical stage 4 from 25% in 2005 Q2 to about 10% in Q1 2010. The decrease in early mortality is probably mainly due to earlier ART initiation (patients in WHO stage 2 with a CD4 count below the threshold or in stage 3). The new guidelines are expected to further reduce early mortality as patients will be started on ART from a CD4 threshold of < 350.

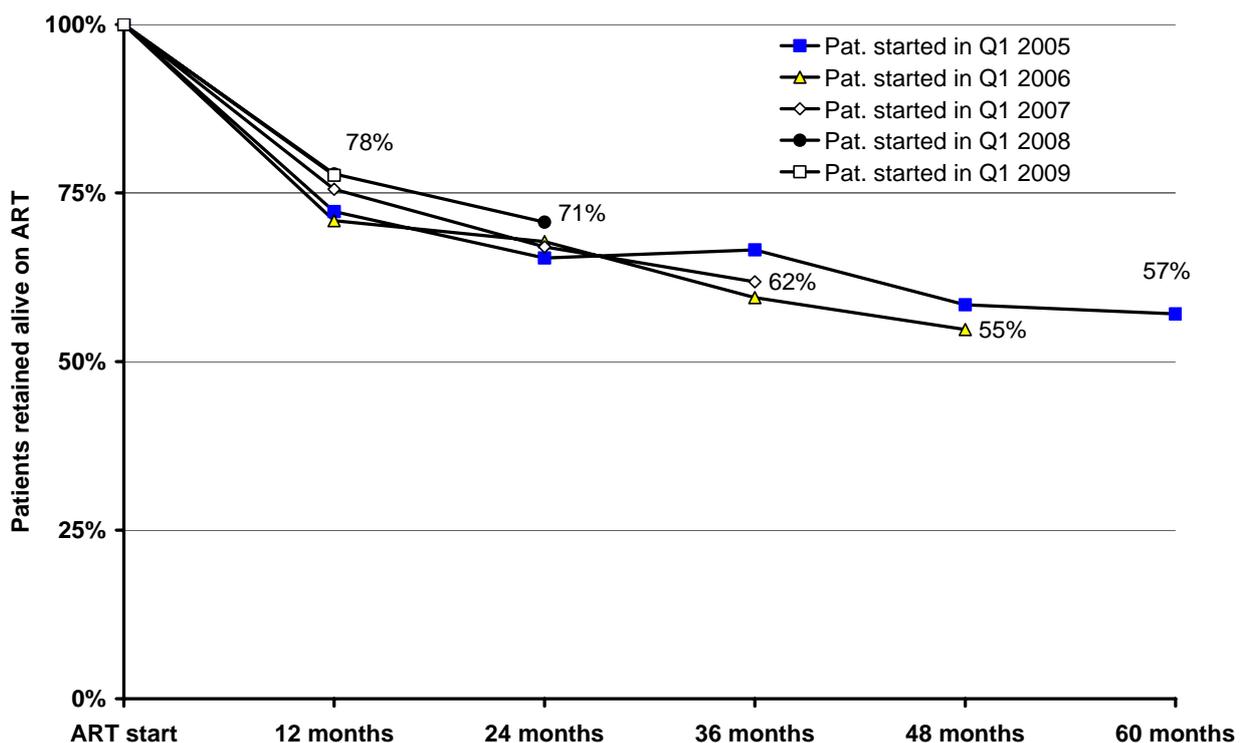
**Figure 4:** Patients starting ART in WHO stage 4 and deaths in the first 3 months after ART initiation. (Shown as proportions among new patients registered each quarter)



### Cohort Survival Analysis

A 12, 24, 36, and 48-month 'cohort outcome analysis' was conducted for patients registered in Q1 2009, Q1 2008, Q1 2007, Q1 2006, and Q1 2005, respectively. A separate 12-month cohort outcome analysis was conducted for children who were under 15 years at the time of ART initiation and who registered for ART in Q1 2009. Similar proportions of **adults (78%)** and **children (81%)** were retained alive on ART after 12 months on treatment: **Figure 5** shows the continuous improvement of long-term treatment outcomes over time. However, the current '12-month survival rate' is still below the WHO target of 85%.

**Figure 5:** 'Cohort survival analysis' 12, 24, 36, 48 and 60 months after ART initiation



## Secondary outcomes of patients retained on ART

Secondary outcomes are available for the 206,805 patients alive on ART who remained at their sites at end of the quarter (secondary outcomes are not available for 4,441 patients *in transit*).

### ART Regimens

93% were on the first line regimen, 7% were on an alternative first line regimens, less than 1% were on second line regimen and <1% were on a non-standard ART regimen. Non-standard regimens are not necessarily substandard regimens. They include patients continuing an ART regimen that was started outside Malawi, patients in research programmes and patients in specialist care.

### Adherence

92% of 85,878 patients with data on the number of doses missed were classified as >95% adherent. Manual estimation of adherence from pill counts is practically difficult and classification can be misleading. To improve on accuracy of data on adherence, the ART program has switched to a direct evaluation of doses missed in 2010. However, in quarter 1 2010, many ART sites had not yet consistently recorded this new measure and adherence data was only available for 41% of patients alive on treatment. It is expected that this situation will improve over the next quarters.

### Side Effects

5,529 (3%) of patients on ART had documented drug side effects at their last clinic visit up to end March 2010. This is probably an under-ascertainment of the true rate of drug side effects (estimated at around 20% for patients on Triomune). Malawi will move to a new first line regimen with fewer side effects in 2011.

### Current TB Status

The revised ART patient master cards include routine screening for TB at every ART visit. This was introduced to address the suspected burden of undetected TB among patients on ART, believed to be responsible for a considerable proportion of early deaths. 127,731 (60%) of patients alive on ART were screened for TB at their last visit before end of March 2010. Out of these, 187 (<1%) were new TB suspects and 1,516 (1%) had current confirmed TB. 1,488 of these were on TB treatment while 28 were not yet / currently not taking TB treatment.

### HIV-related indicator diseases

Table 3 shows the number of ART patients diagnosed and treated for 4 key HIV-related indicator diseases. TB numbers were obtained from the TB registers; Kaposi' Sarcoma (KS) cases from the ART registers; new cryptococcal meningitis (CM) and oesophageal candidiasis (OC) cases from the Diflucan registers or from master cards. The number of OC and CM cases has increased to previous quarters levels. The number of new TB cases was similar to the previous quarter. Of the 86% TB patients who were tested for HIV, only 57% were HIV positive and 37% of positives were already on ART when starting TB treatment. KS cases decreased significantly this quarter.

**Table 3: HIV-related indicator diseases**

	TB cases	TB HIV tested	TB HIV pos	TB already on ART	OC	CM	KS			
2009 Q2	5,772	4,833	84%	3,209	66%	1,015	32%	810	571	476
2009 Q3	6,394	5,558	87%	3,416	61%	1,189	35%	1,459	561	450
2009 Q4	5,617	4,671	83%	3,103	66%	1,337	43%	916	386	610
2010 Q1	5,655	4,853	86%	2,752	57%	1,018	37%	1,101	593	471

## ART coverage among TB patients

Approximately 70% of HIV infected TB patients were receiving ART in Q1 2010. This estimate is based on the following triangulation of TB and ART program data:

*TB Program Data:* A total of 5,655 TB patients were registered during Q1 2010. Assuming an average HIV prevalence of 66% among TB patients, 3,732 of TB patients were estimated to be HIV positive and therefore in need of ART. Given that 1,018 TB patients registered were already on ART at the time of starting TB treatment,  $3,732 - 1,018 = 2,714$  TB patients needed to initiate ART.

*ART Program Data:* An estimated 1,607 patients<sup>2</sup> started ART with a current or recent episode of TB during Q1 2010. This means that an equivalent of 59% (1,607 of 2,714) TB patients who needed to start ART initiated ART in Q1 2010. Overall,  $1,018 + 1,607 = 2,625$  (70%) of the estimated 3,732 HIV infected patients were receiving ART.

## Certificates of excellence

95 sites (41%) with excellent performance in patient and clinic management, including completion of ART registers and master cards and correct cohort analysis were awarded a certificate of excellence. This is the same number as in the previous quarter.

## ART workload and staffing

By the end of March 2010 there were 186 static sites with fewer than 1,000 patients, 40 sites with 1,001–2,000 patients, 40 sites with 2,001–5,000 and 11 sites with over 5,000 patients registered. The number of sites with over 2,000 patients has increased from 46 to 51, reflecting the ever increasing workload.

For 211 of all clinics visited, the supervision team recorded the number of scheduled clinic days per week and the average number of clinicians, nurses and clerks working during clinic days. The total number of days in a week given for ART at these facilities in Q1 2010 was 580, translating into an average of 2.7 working days per facility in a week.

Table 4 shows the total number of staff days per week by cadre and region. The full-time equivalents (FTEs) indicate the equivalent of full-time ART clinicians, nurses and clerks. Thus, for the country as a whole, assuming clinicians work for an average of 200 days per year, the equivalent of 245 clinicians was working full-time in ART delivery each week. The workload per staff in ART clinics is obviously increasing quarter by quarter (compare previous reports).

**Table 4: Total average staffing of ART services by region (public sector)**

Region	Sites	ART Clinic days	Clinician days/ wk.	Nurse days/ week	Clerk days/ week
North	41	102	116	113	109
Central	76	210	329	327	309
South	94	268	499	559	539
Total	211	580	944	999	957
FTE		2.7	245	260	249

<sup>2</sup> 20% of the 2,009 ART patients who were registered with a recent or current episode of TB at the time of ART initiation were assumed to be transfers and were subtracted to adjust for double-counting.

## Stocks of ARV drugs and drug for HIV-diseases

Physical stock counts for ARVs and drugs for HIV-related diseases were performed at all sites at the time of the supervision visit (April 2010). Table 5 shows the total national drug stocks found at facilities with ART clinics. There were enough first line ARV starter packs (70,149 tins) to start about 70,000 new patients on ART, estimated to last for at least 10 months at current rates of recruitment. First line ARV "continuation packs" (531,485 tins) were sufficient to keep the current 211,246 patients plus the new patients starting on treatment for about 2 months (up to May 2010). Stocks of alternative first line ARVs (AZT 20,087 tins) were sufficient to last for about 2 months (up to June 2010) and stocks of EFV (51,856 tins) for more than 12 months. However, late arriving additional stocks were being distributed concurrently with stock-taking and total stocks after distribution were estimated to last until end July. An emergency order of 500,000 tins of first line regimen is scheduled to arrive before mid July to boost national stocks before arrival of the next scheduled consignment in August 2010.

Only 131 (48%) of facilities visited had any stocks of ARVs for maternal PMTCT prophylaxis and 127 (46%) had ARVs for infant PMTCT prophylaxis (single dose nevirapine or AZT combination regimen). This is a slight improvement from the previous quarter.

**Table 5: Drug stocks at all facilities with ART clinics as of March 2010**

Drug	Unit	North	Central	South	Total national stock	Sites with any stock
Lamivir Baby	14	882	2,607	8,786	12,275	25%
d4T 30mg / 3TC	15	7,562	31,350	31,237	70,149	95%
d4T 30mg / 3TC / NVP	15	8,394	38,399	35,689	82,482	95%
Triomune Baby	30	6,893	38,820	43,771	89,484	38%
d4T 30mg / 3TC / NVP	60	60,638	133,423	337,424	531,485	97%
AZT 3TC NVP	60	1,881	6,835	11,371	20,087	53%
AZT / 3TC	60	930	12,817	16,965	30,712	80%
NVP	60	633	1,268	8,498	10,399	23%
d4T 30mg / 3TC	60	2,996	8,052	16,852	27,900	49%
EFV	30	2,288	11,538	38,030	51,856	54%
TDF	30	137	1,748	2,081	3,966	12%
ABC	60	2	529	1,004	1,535	7%
ddl	30	53	744	1,137	1,934	6%
LPV/r	120	763	1,132	1,540	3,435	11%
CPT	60	363,256	436,083	662,356	1,461,695	82%
Cotrimoxazole	1	2,060,328	2,665,626	7,563,669	12,289,623	76%
Fluconazole	1	17,924	51,209	81,975	151,108	37%
Ceftriaxone	1	23,394	87,873	89,665	200,932	37%
Acyclovir	1	433,900	433,850	557,433	1,425,183	61%
Ciprofloxacin	1	46,269	107,914	334,648	488,831	57%
Vincristine	1	678	7,114	1,369	9,161	18%
Morphine	1	50,015	135,989	139,682	325,686	17%
Amitriptyline	1	535,100	575,744	768,557	1,879,401	61%
NVP (PMTCT)	1	2,122	1,378	59,749	63,249	34%
NVP syrup (PMTCT)	1	170	669	1,860	2,699	40%
AZT (PMTCT)	1	74,461	218,362	198,617	491,440	30%
AZT syrup (PMTCT)	1	569	3,426	32,860	36,855	29%

## Post exposure prophylaxis

286 persons received post-exposure prophylaxis during quarter 1 2010. This number is similar to the previous quarter (297).

## Availability of CD4 counts

A total of 53 facilities had CD4 count machines installed, but only 42 of these produced any results during Q1 2010. The quarterly number of CD4 count results produced decreased by about 10,000 to 43,343.

**Table 6: CD4 counts performed by quarter**

	Total CD4 machines	Functional CD4 machines	CD4 samples processed
2009 Q2	52	47	41,171
2009 Q3	52	47	43,882
2009 Q4	52	44	53,017
2010 Q1	53	42	43,343

## Training

An increased number of ART trainings took place in Q1 2010, funded through the Local Assemblies. A total of 351 health workers attended 5 day ART initial trainings. Staff from the Department for HIV and AIDS provided facilitation support for most of these trainings. However, there were consistent problems with inadequate organization and preparation of materials and venues. The cumulative number of HCW trained since the start of the national program remained above the target. Funding for training is given directly to the districts and hence there is a need for NAC to inform the HIV & AIDS Department when money is released to the districts so that the Department can follow up with the DHO's office on the training plans implementation. There was no training in the private sector due to problems with MBCA securing funding

**Table 2: ART training by end March 2010**

Sector	Target	Achievement
Public sector providers trained in Q1 2010	100	351
Private sector providers trained in Q1 2010	25	0
Public sector providers trained (cumulative)	2,600	3,204
Private sector providers trained (cumulative)	500	581

## COMMENTS

### New Integrated PMTCT / ART Guidelines

The Department for HIV and AIDS is currently revising national PMTCT and ART guidelines following the release of new WHO recommendations for PMTCT, and paediatric and adult ART. A new integrated scale-up plan for PMTCT and ART 2010-2013 is being developed. The joint ART/PMTCT TWG has recommended the change in CD4 threshold be adopted (increase to 350), first line regimen be changed to TDF based fixed-dose combination, and that option B+ be adopted for HIV infected pregnant women (pregnant women who are HIV infected initiate life long ART). Family planning will be integrated into ART and PMTCT services towards the goal of 'virtual elimination of MTCT'. The following steps are in progress:

- Revision and development of integrated ART/PMTCT/Pre-ART scale up plans & guidelines
- Revision, production and implementation of integrated training curriculum

- Reprogramming of the RCC budget to accommodate the implementation of the new guidelines.
- Proposal development for submission for GF Round 10 to cover increased program cost

### **Electronic data system (EDS)**

The electronic data system has now been rolled out to 13 sites and a further 5 sites are planned for 2010. There are now 11 sites with more than 5,000 registered patients and manual supervision is becoming a challenge with teams taking 2 days to supervise one site.

### **TB/HIV integration**

The TB team did not join the ART this quarter due to logistical problems, it is hoped that they will be able to join next supervision. It was agreed that the joint visits are useful and should continue though logistics & funding for the TB team need to be worked out. A TB//HIV guideline final draft has been produced by the TB/HIV Technical Working group in line with the TB/HIV framework. An international TB/HIV workshop was held in Lilongwe where country teams came up with integrated work plans for TB/HIV integration in their respective countries

### **Participants in Q1 2010 ART Supervision**

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We finally thank all staff at the facilities for their sincere welcome and co-operation with the HIV Department and its partners during these supportive visits, and we congratulate the staff in these facilities for their excellent work.

**15<sup>th</sup> June 2010**

**New patients registered for ART  
between 01/01/2010 and 31/03/2010**

		Public Sector		Private Sector		National Total	
Total registrations		22,269		858		23,127	
Registration type	New ART initiations (Patients)	17,888	80%	597	70%	18,485	80%
	ART Re-initiations	41	0%	2	0%	43	0%
	Transfers in	4,340	19%	259	30%	4,599	20%
Sex	Males	8,873	40%	381	44%	9,254	40%
	Total females	13,396	60%	477	56%	13,873	60%
	Females non-pregnant	12,237	55%	446	52%	12,683	55%
	Females pregnant	1,159	5%	31	4%	1,190	5%
Age	Adults	20,018	90%	811	95%	20,829	90%
	Total children	2,251	10%	47	5%	2,298	10%
	Children 18m-14yrs	1,737	8%	45	5%	1,782	8%
	Children 0-17 months	514	2%	2	0%	516	2%
Reason for ART	Presumed sev. HIV <18mths	138	1%	1	0%	139	1%
	Confirmed HIV infants	131	1%	0	0%	131	1%
	WHO 1/2, CD4 <threshold	7,012	31%	335	39%	7,347	32%
	WHO 2, TLC <threshold	9	0%	1	0%	10	0%
	WHO stage 3	12,386	56%	374	44%	12,760	55%
	WHO stage 4	2,360	11%	128	15%	2,488	11%
	Reason unspecified	233	1%	19	2%	252	1%
	Total TB	1,935	9%	74	9%	2,009	9%
	TB in last 2 years	1,308	6%	28	3%	1,336	6%
	Current TB	627	3%	46	5%	673	3%
	KS	457	2%	14	2%	471	2%

## Cumulative patients registered for ART up to end 31/03/2010

		Public Sector		Private Sector		National Total	
Total registrations		322,894		12,604		335,498	
Registration type	New ART initiations (Patients)	278,403	86%	10,985	87%	289,388	86%
	ART Re-initiations	49	0%	2	0%	51	0%
	Transfers in	44,442	14%	1,617	13%	46,059	14%
Sex	Males	124,905	39%	6,185	49%	131,090	39%
	Total females	197,989	61%	6,419	51%	204,408	61%
	Females non-pregnant	189,319	59%	6,173	49%	195,492	58%
	Females pregnant	8,670	3%	246	2%	8,916	3%
Age	Adults	293,848	91%	12,061	96%	305,909	91%
	Total children	29,046	9%	543	4%	29,589	9%
	Children 18m-14yrs	25,227	8%	515	4%	25,742	8%
	Children 0-17 months	3,819	1%	28	0%	3,847	1%
Reason for ART	Presumed sev. HIV <18mths	783	0%	2	0%	785	0%
	Confirmed HIV infants	836	0%	0	0%	836	0%
	WHO 1/2, CD4 <threshold	71,835	22%	4,893	39%	76,728	23%
	WHO 2, TLC <threshold	79	0%	5	0%	84	0%
	WHO stage 3	193,951	60%	5,453	43%	199,404	59%
	WHO stage 4	50,601	16%	2,079	16%	52,680	16%
	Reason unspecified	4,809	1%	172	1%	4,981	1%
	Total TB	36,682	11%	933	7%	37,615	11%
	TB in last 2 years	35,842	11%	883	7%	36,725	11%
	Current TB	840	0%	50	0%	890	0%
	KS	10,365	3%	226	2%	10,591	3%
Primary outcomes	Alive on ART (1)	203,549	73%	7,697	70%	211,246	73%
	Defaults	40,795	15%	2,200	20%	42,995	15%
	ART stops	1,159	0%	50	0%	1,209	0%
	Deaths total	32,949	12%	1,040	9%	33,989	12%
	Month 1	9,529	29%	344	33%	9,873	29%
	Month 2	6,547	20%	160	15%	6,707	20%
	Month 3	3,513	11%	109	10%	3,622	11%
	After month 3	13,360	41%	427	41%	13,787	41%
Transfers out	47,895		2,605		50,500		
ARV regimens (2)	Start	186,599	93%	5,411	81%	192,010	93%
	Alternative 1st line total	12,467	6%	1,053	16%	13,520	7%
	AZT	8,001	64%	786	75%	8,787	65%
	EFV	4,084	33%	141	13%	4,225	31%
	AZT+EFV	382	3%	126	12%	508	4%
	Second line total	639	0%	153	2%	792	0%
	Second line adult	547	86%	151	99%	698	88%
	Second line children	92	14%	2	1%	94	12%
Other / Non-standard	391	0%	92	1%	483	0%	
Side effects	Side effects counted	182,324	90%	6,709	87%	189,033	89%
	With side effects	5,449	3%	80	1%	5,529	3%
Adherence	Adherence recorded	83,071	41%	2,807	36%	85,878	41%
	>95% adherent	76,261	92%	2,746	98%	79,007	92%
Current TB status	Status recorded	121,297	60%	6,434	84%	127,731	60%
	TB suspected	182	0%	5	0%	187	0%
	TB confirmed, not on Rx	28	0%	0	0%	28	0%
	TB confirmed, on Rx	1,465	1%	23	0%	1,488	1%

(1) Includes 4,441 patients in transit (transferred out but not yet transferred in at the new site).

(2) Excludes patients in transit

# MALAWI STI TREATMENT PROGRAMME

## QUARTERLY REPORT

### JANUARY TO MARCH 2010

## 1 Access to STI treatment and coverage

Between January and March 2010, 44,115 STI clients were seen at health facilities in Malawi, representing 45% of the 98,600 expected quarterly STI cases in the population<sup>1</sup>. Out of all clients seen, 18,094 (41%) were male and 26,021 (59%) were female. 3,345 (13%) of female STI clients were pregnant. 28,049 clients (64%) were over 24 years, 11,707 (27%) were 20-24 years and 4,553 (10%) were below 20 years old. Considering the estimated STI case burden in the population<sup>1</sup>, access to STI clinics was particularly low among under 20 year olds: 4,553 (25%) of the expected 17,300 STI cases in this age group were seen at the health facilities during this quarter.

## 2 Client Type and STI History

34,529 (78%) of clients were index cases and 9,586 (22%) were partners of index cases. 6,238 (65%) of partners were asymptomatic. Considering that a total of 23,212 partner notification slips were issued, only 41% of those notified presented to the clinic. 31,295 (71%) of clients presented with their first episode of STI in life, 8,267 (20%) clients reported to have had an STI in over three months ago and 4,553 (10%) of clients reported having had an STI within the last three months. Re-occurrence of an STI after a recent episode may be due to re-infection or treatment failure. The fact that 30% of clients presented with a renewed episode indicates that risk reduction is inadequate among many STI clients.

## 3 HIV Status

HIV status was ascertained for 24,738 (56%) clients and 7,872 (32%) of these were HIV positive. 2,702 (34%) of positives were identified through a new test initiated at the STI clinic, while 5,170 (66%) presented with a documented previous positive HIV test result.<sup>2</sup> 2,940 (57%) of clients with a previous positive HIV test result were on ART.

The rate of HIV status ascertainment is still low at STI clinics in Malawi. This is likely due to poor implementation of provider initiated testing and counselling, combined with weak back-referral systems which may lead to incomplete documentation of new HIV test results at the STI clinics. It is worth noting that a substantial proportion of clients who are aware of their HIV infection present with a new episode of an STI. This suggests poor translation of positive living strategies promoted during counseling.

## 4 STI Syndromes

Figure 1 shows the distribution of STI syndromes among the 44,115 cases presenting to STI clinics in the quarter. The most frequent syndrome was abnormal vaginal discharge (AVD) 12,403 (27%) of cases. This is followed by Genital Ulcer Diseases (GUD) with 10,257 (22%) of cases, urethral discharge (UD) with 8,260 (18%)

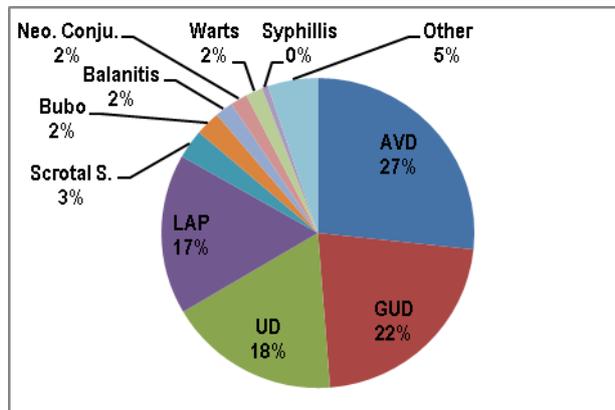
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<sup>1</sup> STI case burden in the population is estimated by applying the age-specific rates of STIs from the 2004 Malawi DHS to the projected population.

<sup>2</sup> Due to the high risk of recent HIV infection among STI clients, previous negative test results are not considered valid and new HIV tests should be performed in all of these cases.

of cases and lower abdominal pain with 7,742 (17%) of cases. Serologically confirmed syphilis, balanitis, bubo, warts and neonatal conjunctivitis each accounted for 1 – 3% of cases.

Figure 1 Distribution of Syndromes of the 44,115 STI clients in 2010 Q1



## 5 Referrals

Given the high risk of recent HIV infection among STI clients, all clients with unknown status and those with a new negative test result should be referred for (repeat) HIV testing and counselling. Only 8,068 (22%) of the 36,243 STI clients with unknown or new negative test result were referred for repeat HTC followed. The referral for ART is lower than expected, as 2,702 new HIV positive clients were identified yet only 1,578 (58%) were referred.

## 6 National STI Clinic Supervision

Around 280 STI clinics in all 3 regions were visited by centrally coordinated supervision teams between March and April 2010. Key observations included:

- The new STI registers were very well filled at almost all sites. However, several private clinics have not yet started using the national M&E tools. Efforts are underway to ensure that the standard national M&E tools for STI are used universally throughout the country.
- A large proportion of STI cases were not managed according to the new STI treatment guidelines. While this was partly due to unavailability of drugs at some sites, the main reason identified was the use of old treatment guidelines. New job aides have been produced and clinical staff have been briefed to address this challenge.

# 2010 Q1 STI Report

## National coverage

			Population denominator	
			98,604	45%
<b>Total Number of Clients</b>	<b>44,115</b>			
<b>Gender and Pregnancy</b>				
Males	18,094	41%	37,993	48%
Females	26,021	59%	60,612	43%
Females Non Pregnant	22,676	87%		
Females Pregnant	3,345	13%		
<b>Age</b>				
Age A (<20 years)	4,358	10%	17,323	25%
Age B (20 - 24 years)	11,707	27%	24,952	47%
Age C (25 years and above)	28,049	64%	56,799	49%
<b>Type</b>				
Index cases	34,529	78%		
Partners	9,586	22%		
Asymptomatic	6,238	65%		
Symptomatic	3,348	35%		
<b>Partner Notification</b>				
Partner Slips issued	23,212			
Partners	9,586	41%		
<b>STI History</b>				
Never	31,295	71%		
Old (previous STI >3months ago)	8,267	19%		
Recent (previous STI <3months ago)	4,553	10%		
<b>HIV Status</b>				
HIV status unknown	19,377	44%		
HIV Status ascertained	24,738	56%		
Total HIV negative (new test)	16,866	68%		
Total HIV positive	7,872	32%		
Total new HIV positive	2,702	34%		
Total previous HIV positive	5,170	66%		
Not on ART	2,230	43%		
On ART	2,940	57%		
<b>Syndromes</b>				
<b>Total Syndromes*</b>	<b>46,471</b>			
Abnormal Vaginal Discharge Total	12,403	27%		
Low Risk	5,177	42%		
High Risk	7,226	58%		
Genital Ulcer Disease	10,257	22%		
Urethral Discharge	8,260	18%		
Lower abdominal Pain	7,742	17%		
Scrotal Swelling	1,411	3%		
Bubo	1,185	3%		
Balanitis	863	2%		
Neonatal Conjunctivitis	821	2%		
Warts	813	2%		
Syphilis	303	1%		
Other	2,413	5%		
<b>Referrals (multiple possible)</b>				
Repeat HTC <sup>&amp;</sup>	8,068	22%		
ART	1,578			
Lab	836			
PMTCT	426			
Gynae	321			
Surgical	198			
Other	979			

\* Syndromes more than number of clients due to multiple syndromes

& All patients with a negative test and unknown status were supposed to have been referred for repeat HTC