



**Government of Malawi
Ministry of Health**

Quarterly HIV Programme Report

HIV Testing and Counseling

Antiretroviral Therapy

Prevention of Mother to Child Transmission

Treatment of Sexually Transmitted Infections

July – September 2010

MALAWI HIV TESTING AND COUNSELLING PROGRAMME

QUARTERLY REPORT

JULY TO SEPT 2010

1 People Tested and Counseled for HIV

The total number of people reported to have been tested and counseled between July and September 2010 was **455,836** with **252,732 (55%)** accessing HTC for the first time in their life. **53,993 (12%)** of tests were positive and those tested with partners was 14%.

Males contributed to 32% of those tested showing no marked difference from the previous two quarters. According to the age groups, only 7% tested in this quarter were children less than 15 years as compared with 53% adults of 25 years and above (see table 1 below)

A total of **2,929,080** people have accessed HTC in Malawi since introduction of the current M&E tools in July 2007. This is determined from the cumulative number of people testing for the first time, which eliminates multiple counting of people coming for repeat testing.

2 HTC sites

772 static HTC sites were operating and reporting data in Q3 2010. This number will be verified during the HTC supportive supervision in Q4. Data from mobile, door to door, and outreach HTC services are reported through static HTC sites and are included in this report.

3 Provider Initiated HIV Testing and Counselling (PITC)

Two pilot trainings on PITC were conducted in this quarter as part of finalizing the development of the training manuals. The HIV & AIDS Department in collaboration with Lighthouse facilitated the pilot trainings; all participants were drawn from CHAM facilities and the TB Program. The CHAM Secretariat and the National TB Program financially supported the activity. It was recommended that a group of master trainers and senior counselors need to finalize the manuals between October and December 2010.

4 Child HTC Training Manuals

A workshop to finalize Child Counselling Training manuals was conducted. Final draft copies of both participant and facilitator's manuals were developed and will be piloted in Q1 of year 2011. A group of certified senior counselors, trainers and partners participated in this activity.

5 Development of Human Resource Capacity

Between July and September, **255** participants were trained as HTC site counselors. Cumulatively, there are **4,570** certified site counselors. NGOs and other implementing partners supported the trainings. Five refresher trainings (Couple HIV testing and Counselling-2, Provider Initiated HIV Testing and Counselling-2 and general HTC) were reported to have taken place during this quarter.

The HIV & AIDS Department supervised 12 out of the 14 site counselors trainings that took place using a standardized tool. It was observed that HTC trainers are facilitating in vernacular languages to enable the participants understand the materials. This is contributing to high failure rate (approximately 15%) especially among the CBDAs as the exam is in English.

6 Evaluation of HTC Log Books

Evaluation tools for HTC log books were finalized and distributed in Rumphi, Mangochi and Lilongwe. The district HTC supervisors will take lead in the evaluation exercise during the districts' routine supervision visits. It was agreed that the evaluation tools will be submitted to the HIV & AIDS Department before end November 2010.

7 HIV Test Kits Logistics System

Some districts mostly in the central and southern region reported stock outs of test kits during this quarter, leading to missed opportunities of HIV testing. The north, where the new HIV test kit logistics system was piloted did not report any stock out. However, during the routine national HTC supervision visit, it was noted that most sites were running out of the Daily Activity Registers (DAR) for HIV tests.

8 Successes

The new HIV test kits logistics system is working well as there was no report of stock outs in the north where the system is scaled up in all districts.

9 Challenges

- Lack of DAR for HIV tests may affect the logistical system that started successfully
- Frequent / persistent stock out of test kits will negatively affect all HIV programs implementation.

10 Way Forward

- Pharmaceutical unit in collaboration with the HIV & AIDS Department should identify funds to print DAR for HIV test.
- Pharmaceutical unit in collaboration with the HIV & AIDS Department should facilitate the timely ordering and shipment of test kits.
- Pharmaceutical unit in collaboration with the HIV & AIDS Department assess and evaluate the system in the south and central regions.
- Pharmaceutical unit in collaboration with the HIV & AIDS Department to identify funds to orient the three districts in the central region on the new supply chain management for HIV test kits

11 HTC Supportive Supervision

Selected sites in all districts were supervised in Q3 by teams from the national level. The health zones and district HTC supervisors participated in the supportive supervision in their respective zones and districts. The areas for focus were:

- Availability of test kits and stock levels
- Infrastructure
- Availability of certified counselors
- Ensuring compliance with HTC protocols
- Ensuring infection prevention measures were being followed

- Ensuring proper documentation in HTC registers
- ensuring timely quarterly reporting of district HTC data, i.e. by 21st day of month following the end of the quarter

12 Quarterly HTC Subgroup meeting

HTC subgroup meeting was held in September 2010. Almost all key partners in HTC service provision were in attendance. HIV & AIDS Department presented updates on HTC and HTC Week Evaluation Report. Members agreed that the HTC week campaign should take place next year in July 2011 and that first National task force meeting to be held in December 2010.

2010 Q3 HTC Report

National coverage

Total Number of Clients	455,836		Population denominator	3,772,503	12%
Gender and Pregnancy					
Males	147,851	32%	1,891,196		8%
Females	307,985	68%	1,881,306		16%
Females Non Pregnant	163,961	53%	1,274,306		13%
Females Pregnant	144,024	47%	151,750		95%
Age					
25 years and above	243,739	53%	1,256,106		19%
15 - 24 years	179,295	39%	789,500		23%
Children Below 15	32,616	7%	872,055		4%
18months - 14 years	25,545	78%			
Below 18months	7,071	22%			
HIV Test History					
Previously tested	203,104	45%			
Never tested before	252,732	55%			
Number of people ever tested since Jul 2007	2,929,080				
Counselling Type					
Counseled with partner	64,848	14%			
Counseled alone	390,988	86%			
HIV Test Results					
Single test negative	398,897	88%			
First and second test negative	1,021	0%			
First and second test positive	54,453	12%			
First and second test discordant	1,280	0%			
Final Result					
No of children <18months with antibody positive	839	12%			
Positive (Adults and children >18 months)	53,993	12%			
Negative (Adults and children >18 months)	400,562	88%			
Inconclusive (Adults and children >18 months)	619	0%			
Referrals (multiple possible)					
ARVs	32,672				
TB	1,020				
PMTCT	14,692				
Other	5,894				

Malawi Antiretroviral Treatment Programme

QUARTERLY REPORT

Results up to 30th September 2010

Executive Summary

By the end of September 2010, **237,621** patients were alive and on ART in Malawi, equivalent to **60%** coverage of the estimated population in need of ART. There were **406** ART clinics (**296** static clinics and **110** outreach / mobile clinics).

Out of the **326,440** patients ever initiated on ART, **237,621** (73%) were retained alive on ART, **38,065** (12%) had died, **49,747** (15%) were lost to follow-up (defaulted) and **1,392** (<1%) were known to have stopped ART. **78%** of adults and **74%** of children were retained alive on ART 12 months after ART initiation. An estimated **216,449** adults and **21,172** children (<15 years) were alive on ART by the end of September 2010.

In the third quarter of 2010 (July to September) a total of **18,579** new patients initiated ART. **4,598** ART patients transferred between clinics (20% of the total **23,241** 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 second quarter of 2010 in WHO stage 1 or 2 with confirmed HIV infection (DNA-PCR) remained similar at **105** (previous **107**), while children under 18 months starting due to presumed severe HIV disease increased from **138** to **153**.

The delayed release of funds in 2009 has continued to affect the supply chain for ARVs during quarter 3, 2010, as drugs continued to arrive late and in small batches, requiring several rounds of distribution and re-location of remaining stocks. The scheduled June consignment only started to arrive in October 2010. However, 2 emergency orders, procured from 'cost savings' with UNICEF arrived between June and September 2010. These emergency supplies included **1,000,800** tins of first line regimen (Triomune), **15,000** Triomune starter packs, **2,000** tins of Lamivudine, **2,000** tins of Nevirapine and **700** Bionline test kits. As of September 2010, total ARV stocks in country and in pipeline are estimated to last until mid 2011.

In June 2010, MOH management endorsed a change in PMTCT and ART and infant feeding policy. The National policy guidelines based on the new recommendations have been developed and approved by MOH. Work on the new guidelines continues and implementation is scheduled for July 2011.

Table 1: ART programme December 2003- September 2010 (public and private sector)

	Dec 2003	Dec 2004	Dec 2005	Dec 2006	Dec 2007	Dec 2008	Dec 2009	Sept 2010
ART sites	9	24	83	141	163	221	377	406
Patients alive on ART	No data	10,761	29,087	59,980	100,649	147,497	198,846	237,621
Coverage of pop. in need of ART ¹	No Data	3%	9%	17%	28%	41%	53%	60%
New ART registrations in year	No Data	10,183	25,634	46,351	61,688	76,581	88,126	70,447
Patients ever initiated on ART (cumulative)	~3000	12,848	35,621	75,503	129,276	200,901	271,105	326,440

¹ ART need defined by CD4<250 cells/mm³

Methods

This report includes quarterly data from all patients who registered at ART clinics in Malawi between July and September 2010 and cumulative data from all patients who ever registered up to 30th September 2010.

All health facilities with static ART clinics in the public and private sectors were visited during October 2010. Data collected covered all 296 static and 110 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.

32 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 **700 working hours** at the sites, each visit lasting an average of 2 ½ 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/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 database 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 standard epidemiological modelling software (EPP and Spectrum) and assuming ART eligibility from a CD4 count <250 cells/mm³.

Results

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

Access to ART

By the end of September 2010 there were **396 static ART sites** in Malawi, owned by government, mission, NGOs and the private sector. **58** of these were ART facilities in the private sector, charging a nominal MK500 per monthly prescription of drugs per patient.

New patients registered between July and September 2010

In Q3 2010, there were a total of 23,241 ART clinic registrations, representing **18,579** (80%) patients who newly initiated ART and 4,598 (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 (**54%**) started ART in WHO Stage 3. The proportion of patients starting in Stage 1 or 2 with a low CD4 count (**33%**) has slightly decreased from the previous quarter (35%) while those starting in WHO stage 4 decreased to **10%**. **105 (41%)** of 258 children under 18 months of age who started ART were infants in WHO stage 1 or 2 with confirmed HIV infection (DNA-PCR, policy of universal ART for infected infants). **1,245 (5%)** of patients registered during Q3, 2010 were pregnant women (at the time of ART initiation).

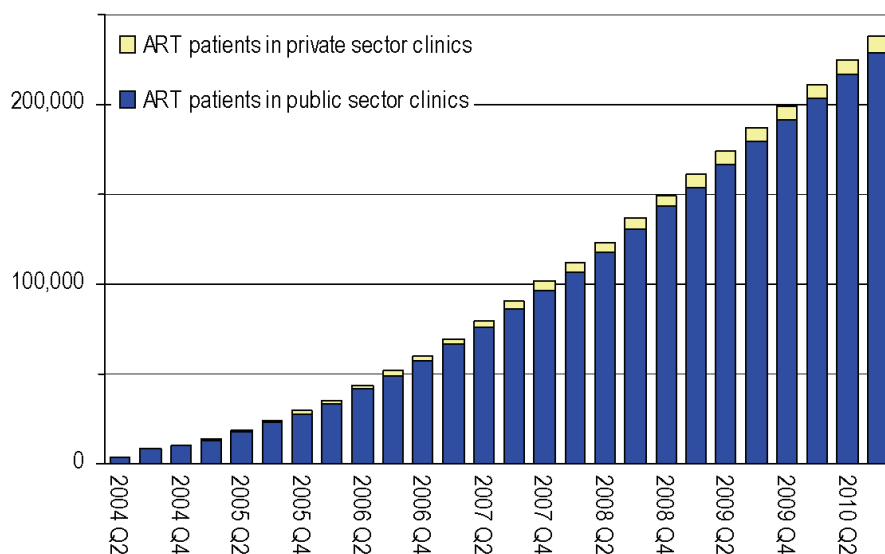
Cumulative patients ever registered up to September 2010

By the end of September 2010, there were a cumulative total of 382,938 clinic registrations, representing **326,440** (85%) patients who newly initiated ART and 56,324 (15%) 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 **14,825** (3.9%) of total patient registrations.

Treatment Outcomes

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



By the end of September 2010, a total of **237,621 patients were alive and on ART**. This number includes 3,102 patients who were assumed to be 'in transit' as of the 30th September 2010, based on the difference between 59,426 patients *transferred out* and 56,324 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 shows the increase of patients alive on ART by the end of each quarter. The number of patients alive on ART increased by **12,611** in Q3 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 Q3 (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.
N	25,495	24,540	96%	6,087	2,315	38%	31,582	26,855	85%
CW	66,675	48,805	73%	15,918	4,925	31%	82,593	53,730	65%
CE	19,946	19,737	99%	4,762	1,586	33%	24,708	21,323	86%
SW	99,361	77,320	78%	23,722	7,803	33%	123,083	85,123	69%
SE	107,104	46,030	43%	25,571	4,560	18%	132,675	50,590	38%
Nat. Total	318,581	216,432	68%	76,060	21,189	28%	394,641	237,621	60%

Table 2 shows the **national ART coverage** at the end of September 2010: 237,621 (**60%**) of 394,641 population in need were on ART. Coverage by geographical zone was inversely related to the absolute population in need of ART: 21,323 (**86%**) of 24,708 people in need of ART in the **Central East Zone** were on ART, while only 50,590

(**38%**) of 132,675 people in the **South East Zone** were covered. Coverage among children and adults was **28%** and **68%**, respectively a slight increase from the previous quarter. The average population in need per ART site was **603** in the **Northern** and **2,412** in the **South East Zone**. This is likely the main reason for the difference in ART coverage. MOH are addressing this situation by accelerating the opening of new ART sites in the CW, SW and SE zone. The high estimated coverage in the Central East and Northern Zone may be 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)

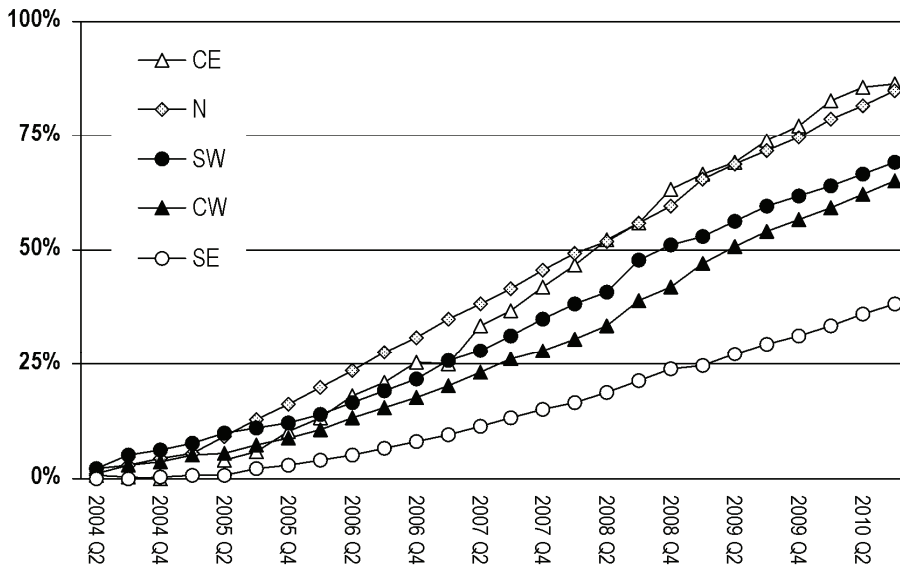


Figure 2 shows that ART coverage has increased much faster in the Central East and Northern Zone than in the South East Zone. There is an indication that the increase in coverage in the Central West, Central East and South West Zones may have started to slow down.

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)

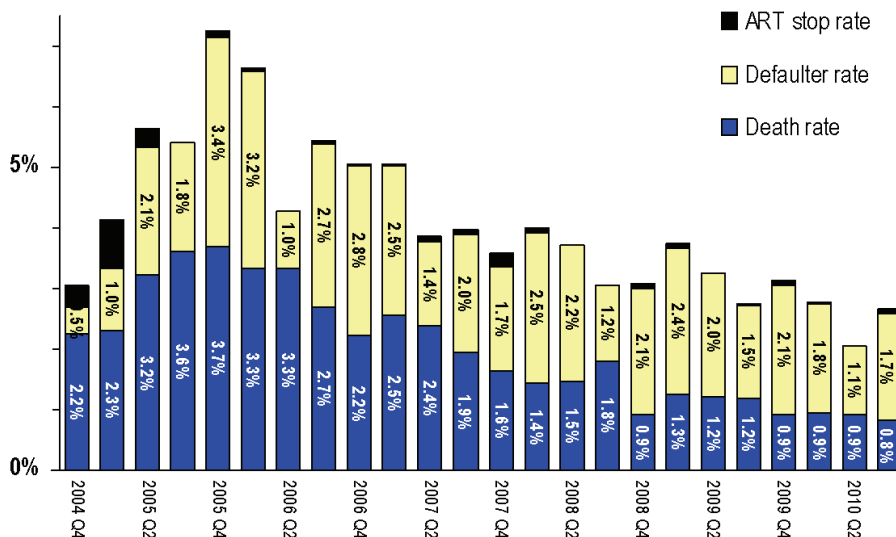
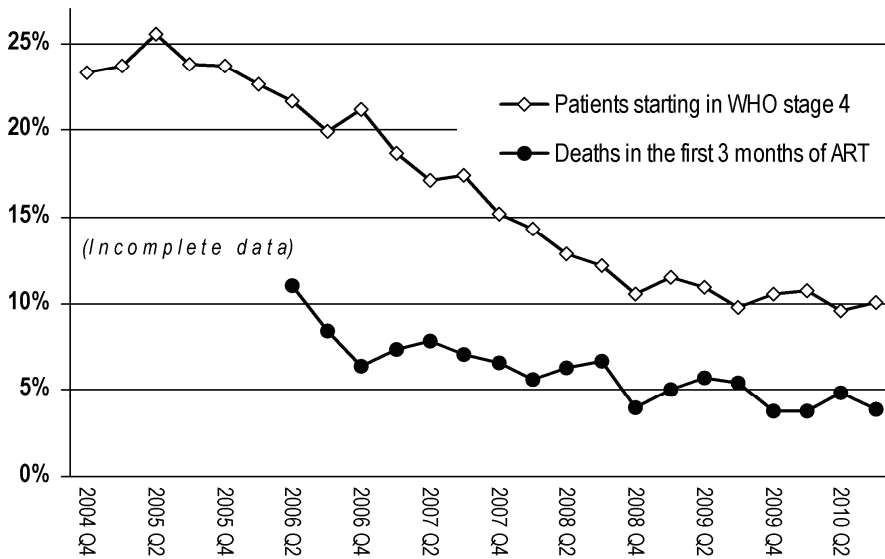


Figure 3 shows the general steady decrease of death and defaulter rates since the start of the national programme. During Q3 2010, there were 1,996 new deaths, 4,197 new defaulters, 218 new ART stops and 54 new ART re-initiations. This translates into a quarterly death rate of 0.8% and a defaulter rate of 1.7% among the patients alive and on treatment during this quarter. By end of September 2010, a cumulative 38,068 (12%) patients were known to have died, 49,747 (15%)

were lost to follow-up/defaulted, and 1,392 (<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. The apparent increase in the loss to follow-up rate compared with the previous quarter may be due to a misclassification of the outcome status of several hundred patients after introduction of the national electronic data system (EDS) at 3 large ART clinics (Kasungu and Machinga District Hospital, Zomba Central Hospital). There was an indication that some ART dispensing visits that occurred during the process of back-entry of paper records were not captured in the EDS, leading to a misclassification of such patients as lost to follow-up in the cohort analysis. It is expected that these data errors will have been fully rectified by the end of Q4 2010.

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)

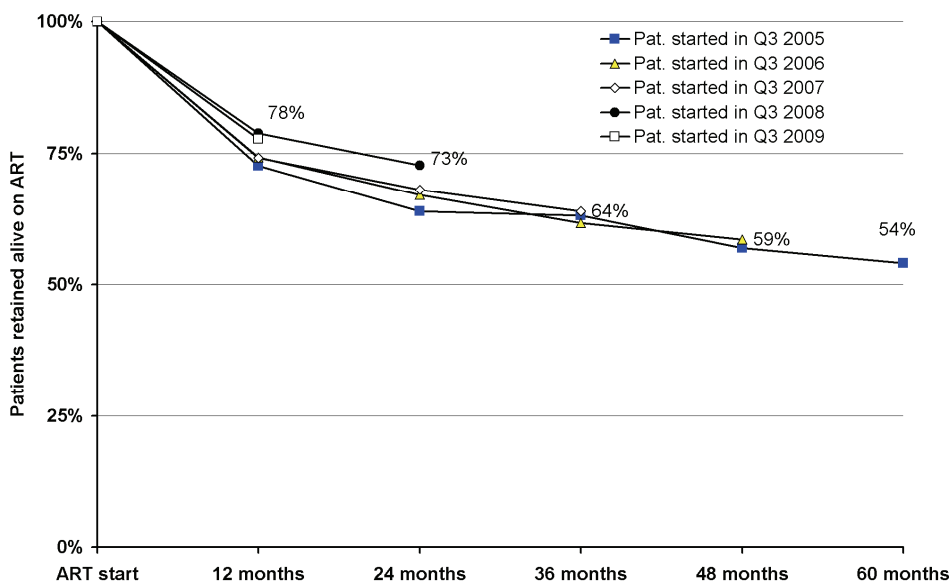


threshold or in stage 3). The new guidelines are expected to further reduce early mortality, as patients will be started on ART from a CD4 threshold of <350

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 5% in Q3 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 Q3 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

Cohort Survival Analysis

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



A 12, 24, 36, and 48-month 'cohort outcome survival analysis' was conducted for patients registered in Q3 2008, Q3 2007, Q3 2006, and Q3 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 Q3 2009. **78% of adults and 74% of children (an decrease from 82% in children from last Quarter)** 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%.

Secondary outcomes of patients retained on ART

Secondary outcomes are available for the **234,519** patients alive on ART who remained at their sites at end of the quarter. Secondary outcomes are not available for 3,102 patients *in transit*.

ART Regimens

91% were on the first line, 7% were on alternative first line and fewer than 1% were on second line regimen. 1% were on a non-standard ART regimen. These are not necessarily substandard regimens and include patients continuing an ART regimen that was started outside Malawi, patients in research programmes and patients in specialist care.

Adherence

86% of 182,529 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. In Q3 of 2010, most ART sites were recording this new measure consistently and adherence data was now available for 77% (65% in Q2) of patients alive on treatment.

Side Effects

5,434 (2%) of patients on ART had documented drug side effects at their last clinic visit up to end September 2010. This is probably an under-ascertainment of the true rate of drug side effects (we assume 20-25% of patients develop at least mild side effects from Triomune). Malawi intends to 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. 211,160 (89%) of patients alive on ART were screened for TB at their last visit before end of September 2010. Out of these, 202 (<1%) were new TB suspects and 1,832 (1%) had current confirmed TB. As of the last visit before the end of September 2010, 1,748 (95%) of these were on TB treatment while 84 were not yet / currently not taking TB treatment.

Cotrimoxazole Preventive Therapy (CPT)

As of the end of September 2010, 95% of ART patients were on CPT. A cumulative total of 273,065 patients (pre-ART and ART) had been entered in CPT registers. CPT registers have not been used consistently by all sites.

HIV-related indicator diseases

Table 3 shows the number of ART patients diagnosed and treated for 4 key HIV-related indicator diseases (data from TB, ART and Diflucan registers or ART treatment cards). Oesophageal candidiasis (OC) and cryptococcal meningitis (CM) cases increased from the previous quarter while the number of new TB cases was similar. Of the 85% TB patients who were tested for HIV, 59% were HIV positive and 47% of positives were already on ART when starting TB treatment. This is the highest proportion recorded since the start of TB/HIV monitoring and is likely due to increased ART coverage. KS cases increased 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 Q4	5,685	4,723	83%	3,148 67%	1,350	43%	916	386	610
2010 Q1	5,655	4,853	86%	2,752 57%	1,018	37%	1,101	593	471
2010 Q2	5,586	4,895	88%	2,934 60%	1,077	37%	1,128	459	517
2010 Q3	6,155	5,229	85%	3,095 59%	1,450	47%	1,309	613	575

TB / HIV

Approximately **77%** of HIV infected TB patients were receiving ART in Q3 2010. This estimate is based on the following triangulation of TB and ART program data:

TB Program Data: A total of **6,155** TB patients were registered during Q3 2010. Assuming an average HIV prevalence of 66% among TB patients, **4,062** of TB patients were estimated to be HIV positive and therefore in need of ART. Given that **1,450** TB patients registered were already on ART at the time of starting TB treatment, $4062 - 1450 = \mathbf{2,612}$ TB patients needed to initiate ART.

ART Program Data: An estimated **1,664** patients² started ART with a current or recent episode of TB during Q3 2010, which is **64%** (1,664 of 2,612) of the TB patients who needed to start ART in Q3 2010. This means that a total of $1,450 + 1,664 = \mathbf{3,114}$ (**77%**) of the estimated 4,062 HIV infected TB patients were receiving ART in Q3 2010.

Certificates of excellence

Sites with excellent performance in patient and clinic management, including completion of ART registers and master cards and correct cohort analysis are awarded a certificate of excellence: 123 (52%) sites in the public sector received a certificate of excellence. This is a considerable improvement from the last quarter.

ART workload and staffing

By the end of September 2010 there were **181** static sites with fewer than 1,000 patients, **44** sites with 1,001–2,000 patients, **40** sites with 2,001–5,000 and **14** sites with over 5,000 patients registered. The number of sites with over 5,000 patients has increased from **13** to **14**, reflecting the ever-increasing workload.

For 213 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 Q3 2010 was 557, translating into an average of 2.6 working days per facility per week.

Table 4 shows the total number of staff days per week by cadre and zone. 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 **198** 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 zone (public sector)

Zone	Sites	ART Clinic days/ wk.	Clinician days/ wk.	Nurse days/ week	Clerk days/ week
N	41	86	93	100	102
CW	42	127	191	218	189
CE	36	88	108	127	91
SW	48	138	214	209	302
SE	46	118	154	229	199
Total	213	557	760	883	883
FTE		2.62	198	230	230

² 20% of the 2,080 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 (October 2010). **Table 5** shows the total national drug stocks found at facilities with ART clinics. There were enough first line ARV starter packs (45,131 tins) to start about 45,000 new patients on ART, estimated to last for at least 7 months at current rates of recruitment. The 1,086,973 tins of first line regimen were sufficient to keep the current 237,621 patients plus the new patients starting on treatment for about 4 months (up to end January 2011). Stocks of alternative first line ARVs (AZT 139,763 tins) were sufficient to last for about 11 months (up to August 2011) and stocks of EFV (66,204 tins) for more than 12 months. An emergency order of 1,000,800 tins of first line regimen arrived July through September 2010 in batches to boost national stocks before arrival of the next scheduled consignment (June 2010), which was delayed to October 2010. The final consignment of this June order is expected to arrive only in January 2011.

162 (60%) of facilities visited had any stocks of ARVs for maternal PMTCT prophylaxis and 160 (59%) had ARVs for infant PMTCT prophylaxis (single dose nevirapine or AZT combination regimen). This represents an improvement of the availability of PMTCT drugs compared with the previous quarter.

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

Drug	Unit	North	Central	South	Total national stock	Sites with any stock
Lamivir Baby	14	4421	224	8,957	13,602	70%
d4T 30mg / 3TC	15	11,854	3,474	29,803	45,131	93%
d4T 30mg / 3TC / NVP	15	13,127	4,026	31,261	48,414	94%
Triomune Baby	30	29,308	6,303	52,454	88,065	86%
d4T 30mg / 3TC / NVP	60	251,685	97,276	738,012	1,086,973	100%
AZT 3TC NVP	60	68,311	7,081	64,371	139,763	75%
AZT / 3TC	60	7,155	1,142	13,857	22,154	81%
NVP	60	451	595	3,119	4,165	23%
d4T 30mg / 3TC	60	16,348	5,111	38,152	59,611	64%
EFV	30	20,650	5,038	40,516	66,204	68%
TDF	30	831	27	2,358	3,216	100% ³
ABC	60	750	373	1,501	2,624	100% ³
ddl	30	793	188	1,442	2,423	100% ³
LPV/r	120	920	697	1,111	2,728	100% ³
CPT	60	162,745	7,995	667,166	837,906	37%
Cotrimoxazole	1	3,721,779	2,910,432	3,504,308	10,136,519	78%
Fluconazole	1	82,163	19,694	364,013	465,870	33%
Ceftriaxone	1	80,843	18,581	68,244	167,668	37%
Acyclovir	1	357,157	153,540	876,995	1,387,692	58%
Ciprofloxacin	1	436,441	57,766	259,333	753,540	55%
Vincristine	1	4,300	1,296	9,992	15,588	18%
Morphine	1	48,529	27,536	15,614	91,679	13%
Amitriptyline	1	571,096	588,550	910,013	2,069,659	57%
NVP (PMTCT)	1	46,745	6,574	49,297	102,616	45%
NVP syrup (PMTCT)	1	521	3,420	1,499	5,440	46%
AZT (PMTCT)	1	291,839	46,469	582,511	920,819	43%
AZT syrup (PMTCT)	1	2,341	607	30,905	33,853	45%

³ Second line treatment is initiated at 10 centres of excellence. All of these had stocks of these regimens.

Post Exposure Prophylaxis (PEP)

270 clients received PEP in Q3 of 2010. This is 19 more than in the previous quarter.

Availability of CD4 counts

A total of 58 facilities had CD4 count machines installed and 54 of these produced any results during Q3 2010. The quarterly number of CD4 count results produced increased by about 1,000 to 45,833.

Table 6: CD4 counts performed by quarter

	Total CD4 machines	Functional CD4 machines	CD4 samples processed
2009 Q4	52	44	53,017
2009 Q1	53	42	43,343
2010 Q2	52	41	44,841
2010 Q3	58	54	45,833

Training

ART trainings have been suspended until implementation of the new integrated PMTCT/ART curriculum in the first half of 2011. Only a few exceptions are planned for districts that are experiencing acute ART staffing shortages. There was no training in the private sector due to problems with MBCA securing funding. The cumulative number of HCW trained since the start of the national program remained above the target.

Table 7: ART training by end September 2010

Sector	Target	Achievement
Public sector providers trained in Q3 2010	100	0
Private sector providers trained in Q3 2010	25	0
Public sector providers trained (cumulative)	2,600	3,247
Private sector providers trained (cumulative)	500	581

Way Forward

Coverage

ART coverage was lowest in the SE zone that has the highest estimated HIV burden. MOH are addressing this situation by accelerating the opening of new ART sites in this zone and by assessing other potential factors such as access to HTC. Detailed plans have been developed in the context of the Round 10 proposal to the Global Fund, which was submitted in August 2010.

New Integrated PMTCT / ART Guidelines

The Department for HIV and AIDS is currently revising national PMTCT, ART, paediatric ART and infant feeding guidelines with support from development partners following the adoption/approval of the new WHO recommendations the MOH management. A new integrated scale-up plan for PMTCT/Pre-ART/ART/FP 2010-2013 is being developed.

The following steps are in progress:

- Revision and development of integrated ART/PMTCT/Pre-ART guidelines and scale up plans
- 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 14 sites and a further 11 sites are planned before July 2011. The migration of data from paper records to electronic data during the initial deployment of the EDS has once more proven a time-consuming and challenging exercise. Missed ART dispensing visits have probably resulted in an under-estimation of patients alive on ART and an over-estimation of patients lost to follow-up in the initial cohort reports from the EDS. However, the systematic cleaning of paper-based data is expected to result in more accurate cohort reports from new EDS sites by the end of the second quarter of operation.

TB/HIV integration

Joint TB/HIV supervision has continued in Q3 of 2010. 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 final draft for TB//HIV guidelines has been developed by the TB/HIV Technical Working group in line with the TB/HIV operational framework. Operational research is being conducted by the TB team on INH prophylaxis with an aim to the roll out of INH prophylaxis in 2011. Further TB/HIV integration will be achieved by training ART providers in TB treatment initiation and decentralization of TB treatment initiation sites.

Participants in Q3 2010 ART Supervision

Janet Chikonda	Prosper Lutala	Stanley Ng'oma	<u>Report compiled by</u> Frank Chimbwandira Austin Mnthambala Eustice Mhango Simon Makombe Joseph Njala Lyson Tenthani Andreas Jahn Zengani Chirwa
Zengani Chirwa	Mrs R Macheke	Joseph Njala	
Stephen Chu	Simon Makombe	Olesi Pasulani	
Stuart Chuka	Cosmas Matewere	Alfred Phiri	
Peter Donda	Hannock Matupi	Sabina Phiri	
Joe Gumulira	Brian Mhango	Macleod Piringu	
Suleiman Ibrahim	Eustice Mhango	Monica Simfukwe	
Agnes Kalitsiro	D Mtambala	Mark Suzumire	
Henry Kamwetsa	Ekwala Mubiala	Everista Tchuwa	
Rehema Kansonkho	Mapay Ngalala	Lyson Tenthani	
Joseph Kasola	Stanley Ngoma		

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.

22th December 2010

**New patients registered for ART
between 01/07/2010 and 30/09/2010**

		Public Sector		Private Sector		National Total	
Total registrations		22,372		869		23,241	
Registration type	New ART initiations (Patients)	17,982	80%	597	69%	18,579	80%
	ART Re-initiations	50	0%	14	2%	64	0%
	Transfers in	4,340	19%	258	30%	4,598	20%
Sex	Males	8,845	40%	408	47%	9,253	40%
	Total females	13,527	60%	461	53%	13,988	60%
	Females non-pregnant	12,323	55%	420	48%	12,743	55%
	Females pregnant	1,204	5%	41	5%	1,245	5%
Age	Adults	20,203	90%	797	92%	21,000	90%
	Total children	2,169	10%	72	8%	2,241	10%
	Children 18m-14yrs	1,787	8%	63	7%	1,850	8%
	Children 0-17 months	382	2%	9	1%	391	2%
Reason for ART	Presumed sev. HIV <18mths	150	1%	3	0%	153	1%
	Confirmed HIV infants	105	0%	0	0%	105	0%
	WHO 1/2, CD4 <threshold	7,385	33%	294	34%	7,679	33%
	WHO 2, TLC <threshold	1	0%	0	0%	1	0%
	WHO stage 3	12,084	54%	442	51%	12,526	54%
	WHO stage 4	2,214	10%	122	14%	2,336	10%
	Reason unspecified	433	2%	8	1%	441	2%
	Total TB	2,008	9%	72	8%	2,080	9%
	TB in last 2 years	1,064	5%	38	4%	1,102	5%
	Current TB	944	4%	34	4%	978	4%
	KS	549	2%	26	3%	575	2%

Cumulative patients registered for ART up to end 30/09/2010

		Public Sector		Private Sector		National Total	
Total registrations		368,113		14,825		382,938	
Registration type	New ART initiations (Patients)	313,983	85%	12,457	84%	326,440	85%
	ART Re-initiations	147	0%	27	0%	174	0%
	Transfers in	53,983	15%	2,341	16%	56,324	15%
Sex	Males	142,684	39%	7,164	48%	149,848	39%
	Total females	225,429	61%	7,661	52%	233,090	61%
	Females non-pregnant	214,383	58%	7,328	49%	221,711	58%
	Females pregnant	11,046	3%	333	2%	11,379	3%
Age	Adults	334,654	91%	14,165	96%	348,819	91%
	Total children	33,459	9%	660	4%	34,119	9%
	Children 18m-14yrs	28,717	8%	621	4%	29,338	8%
	Children 0-17 months	4,742	1%	39	0%	4,781	1%
Reason for ART	Presumed sev. HIV <18mths	1,028	0%	9	0%	1,037	0%
	Confirmed HIV infants	1,016	0%	0	0%	1,016	0%
	WHO 1/2, CD4 <threshold	87,688	24%	5,577	38%	93,265	24%
	WHO 2, TLC <threshold	82	0%	5	0%	87	0%
	WHO stage 3	215,599	59%	6,608	45%	222,207	58%
	WHO stage 4	54,405	15%	2,440	16%	56,845	15%
	Reason unspecified	8,295	2%	186	1%	8,481	2%
	Total TB	39,958	11%	1,120	8%	41,078	11%
	TB in last 2 years	31,404	9%	1,008	7%	32,412	8%
	Current TB	8,554	2%	112	1%	8,666	2%
	KS	11,539	3%	293	2%	11,832	3%
Primary outcomes	Alive on ART (1)	228,801	73%	8,820	71%	237,621	73%
	Defaults	47,339	15%	2,408	19%	49,747	15%
	ART stops	1,340	0%	52	0%	1,392	0%
	Deaths total	36,826	12%	1,239	10%	38,065	12%
	Month 1	10,504	29%	404	33%	10,908	29%
	Month 2	7,172	19%	191	15%	7,363	19%
	Month 3	3,895	11%	113	9%	4,008	11%
	After month 3	15,255	41%	531	43%	15,786	41%
Transfers out	56,322		3,104		59,426		
ARV regimens (2)	Start	207,910	92%	6,458	80%	214,368	91%
	Alternative 1st line total	15,376	7%	1,363	17%	16,739	7%
	AZT	10,036	65%	1,065	78%	11,101	66%
	EFV	4,414	29%	153	11%	4,567	27%
	AZT+EFV	926	6%	145	11%	1,071	6%
	Second line total	946	0%	133	2%	1,079	0%
	Second line adult	799	84%	125	94%	924	86%
	Second line children	147	16%	8	6%	155	14%
Other / Non-standard	2,230	1%	103	1%	2,333	1%	
Side effects	Side effects counted	226,462	99%	7,848	89%	234,310	99%
	With side effects	4,189	2%	1,245	16%	5,434	2%
Adherence	Adherence recorded	176,811	77%	5,718	65%	182,529	77%
	>95% adherent	151,287	86%	5,678	99%	156,965	86%
Current TB status	Status recorded	203,174	89%	7,986	91%	211,160	89%
	TB suspected	200	0%	2	0%	202	0%
	TB confirmed, not on Rx	84	0%	0	0%	84	0%
	TB confirmed, on Rx	1,720	1%	28	0%	1,748	1%

(1) Includes 3,102 patients in transit (transferred out but not yet transferred in at the new site).

(2) Excludes patients in transit

MALAWI PMTCT PROGRAMME QUARTERLY REPORT

JULY TO SEPTEMBER 2010

1 Executive Summary

Between July and September 2010, 491 facilities in Malawi were providing PMTCT at ANC and/or maternity. 9,240 (82%) of 11,223 women attending ANC who were known to be HIV positive received ARVs. This represents 51% PMTCT coverage among the estimated 18,210¹ HIV positive pregnant women in Malawi during this quarter. 7,388 (87%) of infants born to known HIV infected mothers at maternity received ARV prophylaxis. This represents 41% 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 standard 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 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. While this ensures that each woman is counted only once in each clinic, the system is still prone to a small degree of double-counting caused by women who access multiple clinics in the course of one pregnancy.

This is the first quarterly cohort report using the new tools. The report is based on the outcomes of the cohort of women who **started ANC between January and March 2010** and who **concluded their ANC visits before end of September 2010**. Unlike the previous two preliminary reports that were based only on the first visit, the current report covers the services that women received in the course of all subsequent visits between January and September 2010.

Data were 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. Since this was the first round of cohort reporting from the new tools, two day district workshops were organised with service providers in order to support the district teams in the compilation and cleaning of their data. All data were compiled in an Excel spreadsheet at the Department for HIV and AIDS.

Data from ANC and maternity are collated and presented separately in this report. This is done because fewer women attend maternity than ANC and because it is practically impossible to link, collate and remove the overlap between ANC and maternity records of individual women for national reporting.

Coverage was estimated by dividing the number of patients served by the population in need of the respective service. Population denominators were derived from the expected number of HIV negative and positive pregnant women per quarter in Malawi, based on demographic and epidemiological projections. However, this denominator may not be a true representation of the actual population accessing the health facilities, particularly in the border districts.

¹ Population denominators do not include patients from neighbouring countries accessing Malawian health facilities. In this report, the number of women attending ANC has for the first time exceeded the estimated number of pregnant women. (See Methods)

3 Results

3.1 PMTCT Sites

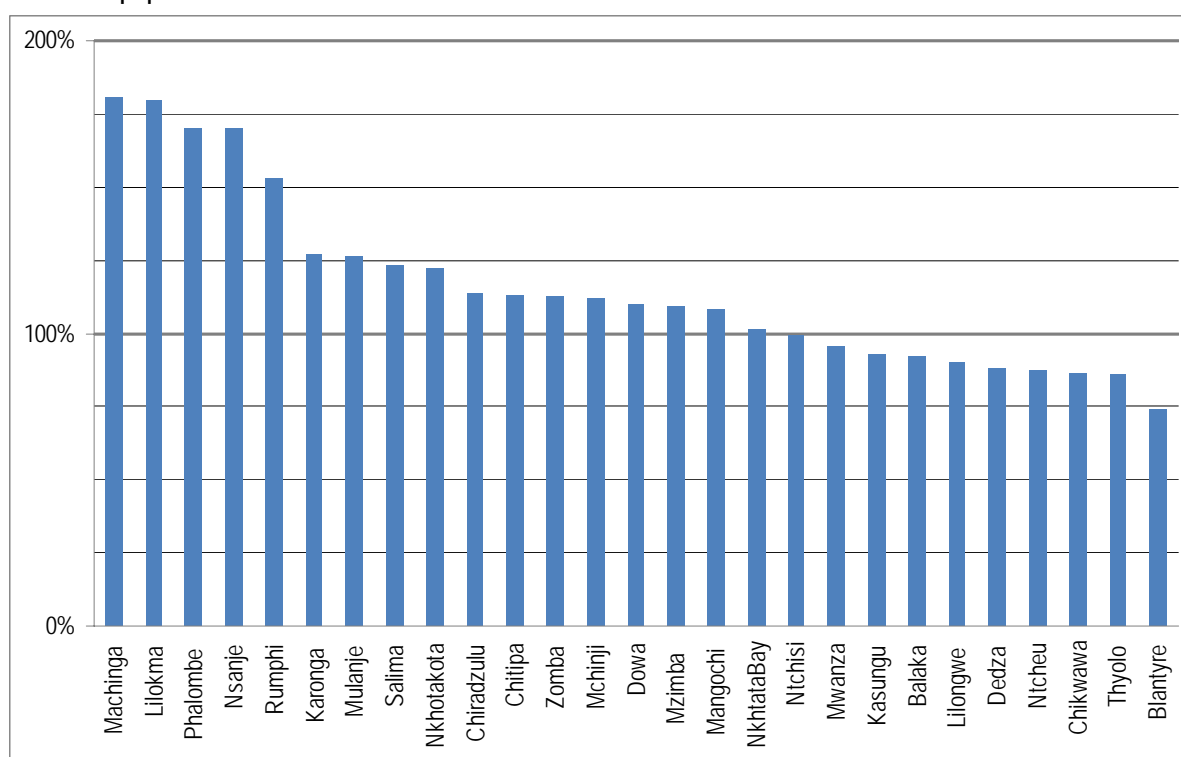
The number of facilities providing PMTCT services in the quarter is defined through reported performance of *PMTCT signal functions* within maternal and child health services. For this quarter, only ANC and maternity services have been considered as there is no standard PMTCT monitoring system for under 5 clinics in place yet. During Q3 2010, there were **491** facilities that had provided ARVs for at least one HIV infected woman at ANC and/or one woman and her infant at maternity.

There is an apparent increase in the number of PMTCT facilities (458 in Q2 2010). This is likely due to the concentrated effort in data collection that has resulted in almost complete national data from ANC in Q3 2010.

3.2 ANC

159,817 women were in the cohort that started ANC between January and March 2010 and completed their ANC visits by September 2010. This is equivalent to **105%** of the expected 151,750 pregnant women in the population per quarter, which is beyond the expected 93% of pregnant women who attend ANC in Malawi (2004 DHS). While this is certainly an indication for very high ANC attendance rates, this 'excess' is probably mainly due to women from neighbouring countries accessing ANC in Malawi and to a lesser extent due to double registration of women who visited multiple ANC clinics during their pregnancy. Figure 1 shows the ratio between the reported number of women attending ANC and the estimated number of pregnant women in the district population. This confirms the pattern of a particularly high access (ratio >1) in districts with a large cross-border population (Likoma, Phalombe, Nsanje, Rumphi, Karonga, Mulanje). The excess seen in other districts is probably due to patients from neighbouring districts frequenting facilities that are easier to access (Zomba and Balaka residents accessing ANC in Machinga, Blantyre residents accessing ANC in Chiradzulu).

Figure 1: Ratio between the reported number of women attending ANC and the estimated number of pregnancies in the district population for Q3 of 2010



15,585 (10%) of women started ANC in their first trimester. The total number of visits for the cohort under review is 406,193. Only 21% of women attained the minimum 4 focussed ANC visits.

24,737 (16%) of women were tested for syphilis at ANC and 1,204 (5%) were syphilis positive. This proportion is higher than the expected syphilis prevalence among pregnant women (<1% ANC Surveillance Survey 2007). This is probably related to the limited availability of syphilis test kits at the facilities that may have prompted health workers to prioritise syphilis testing in women with specific risk factors.

3.2.1 HIV Testing

120,413 (75%) of 159,817 ANC attendees had their HIV status ascertained. Out of these, 9,428 (8%) presented with a valid documented previous HIV test result and 110,985 (92%) received a new HIV test result at ANC. A total of 11,223 (9%) women were HIV positive. This is lower than the expected 12% HIV prevalence at ANC and this is likely due to suboptimal sensitivity of HIV testing in high volume service provision settings.

The 120,413 women whose HIV status was ascertained at ANC represent 62% of the expected 151,750 pregnant women in the population. The inclusion of HIV testing during subsequent visits in the cohort analysis should have resulted in an increase from previous reports that were only based on first visits. However, the observed decline from 68% to 62% is probably explained by a misclassification of HIV negative women who failed to undergo repeat testing 3 months after their first negative test. Such women may have been misclassified as 'HIV status unknown' in the cohort outcome analysis.

3.2.2 ARV Coverage

9,240 (82%) of HIV infected women attending ANC received maternal ARVs. This represents 51% coverage of the estimated 18,210 HIV positive pregnant women in the population in this quarter. This is a remarkable increase from the 35% reported in the previous quarter, probably due to the inclusion of women who started ARVs in the course of subsequent visits.

Of the 9,240 women who received any ARVs, 3,638 (39%) were given a single tablet of nevirapine to take home and 3,139 (34%) were started on AZT combination regimen.

7,086 (63%) of 11,223 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. At the end of ANC follow-up, 2,674 (38%) were found ART eligible and 2,463 were on ART. This represents 27% ART coverage among the estimated 9,105 pregnant women eligible for ART in the population.²

9,881 (88%) of HIV infected women at ANC were on Cotrimoxazole Preventive Therapy.

1,104 (10%) of HIV infected women attending ANC received the infant dose of ARVs (single dose nevirapine syrup) to take home.

3.3 Maternity

Between July and September 2010, 107,565 women attended maternity. This is equivalent to 71% of the expected 151,750 deliveries in the population during the quarter. Out of all 114,409 admissions (includes out referrals before delivery), 107,211 (98%) delivered at a facility, while 2,311 (2%) had already delivered before reaching a facility. This is equivalent to 71% of estimated deliveries in Malawi occurring at health facilities, which is much higher than the 57% of estimated hospital deliveries in the 2004 DHS. While the rate of hospital deliveries is probably higher than in 2004, this considerable apparent increase is likely to be an overestimate of population coverage. The data in the current report are more complete than in previous quarters due to the active support given to the districts with data collection. Similar to the ANC data, this high level of data completeness has revealed the contribution of residents from neighbouring countries to the numerator while these are not included in the population denominator.

² About half all HIV positive pregnant women in Malawi are estimated to have a CD4 count <350 cells/mm³ and are therefore eligible for ART.

A total of 102,235 (95%) of deliveries were conducted by skilled medical staff, 1,310 (1%) by paramedical staff and 4,020 (4%) were not attended by any of the above (probably mainly among women who delivered before reaching the facility). 11,354 (10%) of women developed obstetric complications. The most common leading complications were obstructed / prolonged labour (3,295 cases, 29%) and haemorrhage (1,977 cases, 17%). 107,373 (99%) of women were discharged alive and 192 (<1%) women died before discharge, which is equivalent to a maternal mortality ratio of 178 per 100,000 live births among women attending maternity.

A total of 109,522 babies were born, 105,823 (97%) were singletons and 3,699 (3%) were twins/multiples. There were 107,507 (98%) live births and 2,015 (2%) stillbirths. 106,456 (99%) of babies born alive were discharged alive and 1,051 (1%) died before discharge.

3.3.1 HIV Testing

100,503 (88%) women had their HIV status ascertained at maternity. Out of these, 94,840 (94%) presented with a valid previous HIV test result and 5,663 (6%) received a new HIV test result. A total of 9,044 (9%) women were HIV positive and 91,459 (91%) were negative. The 99,135 women whose HIV status was ascertained at maternity represent 66% of the expected 151,750 women delivering in the population.

HIV exposure status was ascertained for 95,939 (90%) out of 106,456 babies born and discharged alive. 8,482 (9%) were born to a known HIV positive mother.

3.3.2 ARV Coverage

A total of 7,262 (80%) of HIV infected women attending maternity received ARVs during labour. Out of these, 2,116 (29%) received the labour dose of AZT combination regimen, 2,977 (41%) received single dose nevirapine and 2,169 (30%) were on ART. 5,159 (57%) of HIV positive women were taking ARVs already during pregnancy: 2,768 (54%) of these were on AZT combination regimen and 2,391 (46%) were on ART (lifelong triple therapy). AZT and ART should be taken for more than 4 weeks during pregnancy to ensure optimal effectiveness. 1,797 (65%) of women on AZT and 2,097 (88%) of women on ART had received the respective regimen for over 4 weeks during pregnancy.

A total of 7,388 (87%) of infants who were known HIV exposed and discharged alive received ARV prophylaxis at maternity. This represents 41% coverage of the estimated 18,210 HIV exposed infants born in the population in this quarter. 2,443 (33%) HIV exposed infants received single dose nevirapine and 4,945 (67%) started AZT combination regimen. 3,306 (67%) of infants on AZT combination regimen received nevirapine + AZT syrup and 1,639 (33%) received only AZT syrup.

4 Trainings

A total of 26 health workers attended the basic PMTCT training in Nkhatabay. Countrywide, a total of 564 PMTCT providers received further training in combination regimen and Early Infant Diagnosis (EID). In order to increase the pool of national supervisors 24 experienced providers drawn from all the zones were trained in supervision.

5 Comments

This is the first quarterly cohort report for ANC services in Malawi. The improved reporting method has generated data of high completeness and accuracy, largely eliminating previous problems of multiple counting and omission of services received during subsequent visits. As expected, the reporting of women's final status at the end of ANC has led to an increase in the reported number women with ascertained HIV status (63% to 67%), those assessed for ART eligibility (57% to 63%) and those tested for syphilis (10% to 15%).

However, intermittent stock-outs of HIV and syphilis rapid test kits and ARVs continue to result in 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 relatively low rate of facility deliveries in Malawi.

Consistently, the proportion of HIV positive women at ANC (9%) and maternity (9%) is lower than the estimated HIV prevalence among pregnant women (12%). There are 2 plausible explanations for this: 1) HIV positive women were less likely to attend ANC and / or have their HIV status ascertained; 2) sub-optimal sensitivity of HIV rapid testing at ANC. Quality assurance methods for HIV testing are currently being strengthened to address these concerns.

MOH with its partners is working to improve on these service delivery bottlenecks in order to address the situation. A major improvement of PMTCT coverage and impact is expected from the implementation of universal ART for HIV infected pregnant and lactating women which is scheduled to start mid 2011.

2010 Q3 ANC Report

National coverage Indicator

			Population denominator		
Total women attending first ANC Jul-Sep 2010	147,452		151,750	97%	PMTCT 5
Total women attending first ANC (Jan - Mar 2010)	159,817		151,750	105%	
Total visits by women who started ANC Jan - Mar 201	406,193				
Distribution of women by number of visits					
Women with 1 visit	37,472	23%			
Women with 2 visits	42,459	27%			
Women with 3 visits	45,971	29%			
Women with 4 visits	27,095	17%			
Women with 5 or more visits	6,820	4%			
Trimester of first visit					
First visits at 0-12 weeks	15,585	10%	151,750	10%	
First visits at >12 weeks	144,232	90%	151,750	95%	
(Pre-) Eclampsia					
No	156,002	98%			
Yes	3,815	2%			
TTV doses					
0-1	63,779	40%			
2 or more	96,038	60%			
SP doses received					
0-1	65,548	41%			
2 or more	94,269	59%			
Iron and folate tablets received					
0-119 tabs	115,152	72%			
120 or more tabs	44,665	28%			
Syphilis status					
Total women not tested for syphilis	135,080	85%			
Total women tested for syphilis	24,737	15%	151,750	16%	
Syphilis negative	23,533	95%			
Syphilis positive	1,204	5%			
HIV status					
Total women with unknown HIV status	39,404	25%			
Total women with ascertained HIV status	120,413	75%	151,750	79%	
Total women with valid previous test result	9,428	8%			PMTCT 6
Negative	6,543	69%			
Positive	2,885	31%			PMTCT 7
Total women newly tested at ANC	110,985	92%			PMTCT 8
Negative	102,647	92%			
Positive	8,338	8%			PMTCT 9
Total women HIV negative	109,190	91%	133,540	82%	
Total women HIV positive	11,223	9%	18,210	62%	PMTCT 10
ART eligibility among HIV positive women					
Total women with unknown ART eligibility	4,137	37%	18,210	23%	
Total women assessed for ART eligibility	7,086	63%	18,210	39%	PMTCT 11
ART not eligible	4,412	62%			
ART eligible	2,674	38%			PMTCT 12
CPT coverage among HIV infected women					
Not on CPT	1,342	12%			
On CPT	9,881	88%			PMTCT 17
ARV regimen among HIV infected women					
Total women receiving no ARVs	1,983	18%	18,210	11%	
Total women receiving ARVs	9,240	82%	18,210	51%	PMTCT 16
ART (1)	2,463	27%	9,105	27%	PMTCT 13
Single dose NVP	3,638	39%			PMTCT 14
AZT combination regimen	3,139	34%			PMTCT 15
ARVs dispensed for infant dose					
ARVs not dispensed	10,119	90%			
ARVs dispensed	1,104	10%			PMTCT 18

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

2010 Q3 Maternity Report (Page 1)

			National coverage		Indicator
			Population denominator		
Total admissions to Labour & Delivery (1)	114,409				
Total women attending Labour & Delivery	107,565		151,750	71%	<i>PMTCT 19</i>
HIV status					
Total women with unknown HIV status	13,906	12%			
Total women with ascertained HIV status	100,503	88%	151,750	66%	
Total women with valid previous result					
Total women with valid previous result	94,840	94%			<i>PMTCT 20</i>
Negative					
Negative	86,431	91%			
Positive					
Positive	8,409	9%			<i>PMTCT 21</i>
Total women newly tested at maternity					
Total women newly tested at maternity	5,663	6%			<i>PMTCT 22</i>
Negative					
Negative	5,028	89%			
Positive					
Positive	635	11%			<i>PMTCT 23</i>
Total women HIV negative	91,459	91%			
Total women HIV positive	9,044	9%			<i>PMTCT 24</i>
ARVs during pregnancy among HIV positives					
Total women receiving no ARVs	109,250	95%	151,750	72%	
Total women receiving ARVs	5,159	57%	151,750	3%	
AZT combination regimen					
AZT <4 weeks					
AZT <4 weeks	971	35%			
AZT ≥4 weeks					
AZT ≥4 weeks	1,797	65%			
ART (triple therapy)					
ART <4weeks					
ART <4weeks	2,391	46%	18,210	13%	
ART ≥4 weeks					
ART ≥4 weeks	294	12%			
ART ≥4 weeks	2,097	88%			
ARVs received during labour among HIV positives					
Total women receiving no ARVs	1,782	20%			
Total women receiving ARVs	7,262	80%	18,210	40%	<i>PMTCT 28</i>
ART					
ART	2,169	30%	18,210	12%	<i>PMTCT 27</i>
Single dose NVP					
Single dose NVP	2,977	41%	18,210	16%	<i>PMTCT 25</i>
AZT combination regimen					
AZT combination regimen	2,116	29%	18,210	12%	<i>PMTCT 26</i>
Obstetric complications					
Total women with no complications	103,055	90%			
Total women with complications	11,354	10%			
Haemorrhage					
Haemorrhage	1,977	17%			
Obstructed / prolonged labour					
Obstructed / prolonged labour	3,295	29%			
(pre-) Eclampsia					
(pre-) Eclampsia	746	7%			
Maternal sepsis					
Maternal sepsis	155	1%			
Ruptured uterus					
Ruptured uterus	131	1%			
Other maternal complications					
Other maternal complications	5,050	44%			
Referred out before delivery					
No	107,565	94%			
Yes	6,844	6%			
Staff conducting delivery					
MO, CO, nurse/midwife, MA	102,235	95%	151,750	67%	
PA, WA, HSA	1,310	1%			
Other	4,020	4%			
Mother survival					
Discharged alive	107,373	100%			
Died	192	0%	107,888	178	<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)

2010 Q3 Maternity Report (Page 2)

			National coverage	Indicator
			Population denominator	
Twins				
Total babies born	109,522		151,750	72%
Singleton babies	105,823	97%		
Twin / multiple babies	3,699	3%		
Delivery place				
Total deliveries at a health facility	107,211	98%	151,750	71%
This facility	104,567	98%		
Other facility	2,644	2%		
Total deliveries before reaching the facility	2,311	2%		
In transit	549	24%		
Home / TBA	1,762	76%		
Delivery mode				
Spontaneous vaginal	99,682	91%		
Vacuum extraction	1,438	1%		
Breech	2,222	2%		
Caesarean section	6,266	6%	151,750	4%
Infant complications				
Total infants with no complications	98,761	90%		
Total infants with complications	10,761	10%		
Prematurity	3,359	31%		
Low birth weight (<2500g)	3,086	29%		
Asphyxia	2,246	21%		
Newborn sepsis	579	5%		
Other infant complications	1,491	14%		
Infant survival				
Total live births	107,507	98%		
Discharged alive	106,456	99%		
Neonatal deaths	1,051	1%		
Stillbirths	2,015	2%		
Fresh	1,132	56%		
Macerated	883	44%		
Infant HIV exposure and ARV prophylaxis				
Infants with Unknown HIV exposure status	10,898	10%		
Infants with known HIV exposure status	95,939	90%	151,750	63%
Infants not HIV exposed	87,457	91%		
Infants HIV exposed	8,482	9%	18,210	47%
Received no ARVs	1,094	13%		
Received any ARVs	7,388	87%	18,210	41%
Single dose NVP	2,443	33%	18,210	13%
AZT prophylaxis	4,945	67%	18,210	27%
Started AZT + sd NVP	3,306	67%	18,210	18%
Started AZT only	1,639	33%	18,210	9%
Breast Feeding Initiated				
No	6,513	6%		
Yes	103,058	94%		

MALAWI STI TREATMENT PROGRAMME QUARTERLY REPORT

JULY TO SEPT 2010

1 Access to STI treatment and coverage

Between July and September 2010, 46,917 STI clients were served at health facilities in Malawi, representing 48% of the 98,600 expected quarterly STI cases in the population¹. Out of all clients, 19,765 (42%) were male and 27,152 (58%) were female. 3,590 (13%) of female STI clients were pregnant. 30,575 clients (65%) were over 24 years, 11,957 (25%) were 20-24 years and 4,413 (10%) were below 20 years old. Considering the estimated STI case burden in the population¹, access to STI clinics was particularly low among under 20 year olds: 4,413 (25%) of the expected 17,323 STI cases in this age group were seen at the health facilities during this quarter.

2 Client Type and STI History

37,696 (78%) of clients were index cases and 10,083 (22%) were partners of index cases. 6,343 (64%) of partners were asymptomatic. Considering that a total of 24,612 partner notification slips were issued, only 41% of those notified presented to the clinic. 32,459 (69%) of clients presented with their first lifetime episode of STI, 10,108 (22%) clients reported to have had an STI in over three months ago and 4,213 (9%) 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 31% (28% in the previous quarter) of clients presented with a renewed STI episode can be seen as evidence that risk reduction remains inadequate among many STI clients.

3 HIV Status

HIV status was ascertained for 25,765 (55%) clients and 7,896 (31%) of these were HIV positive. 2,588 (33%) of positives were identified through a new test initiated at the STI clinic, while 5,308 (67%) presented with a documented previous positive HIV test result.² 2,694 (51%) of clients with a previous positive HIV test result were on ART.

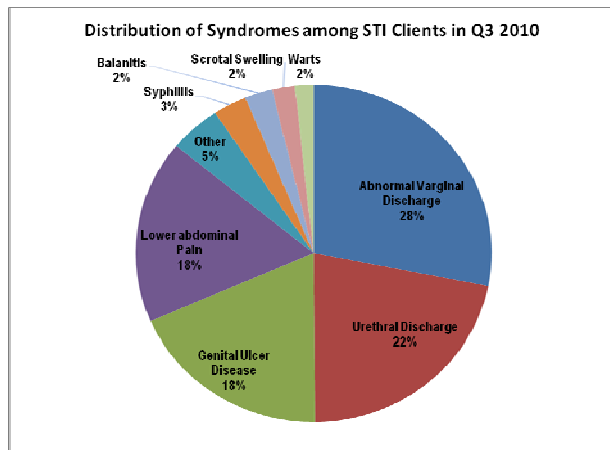
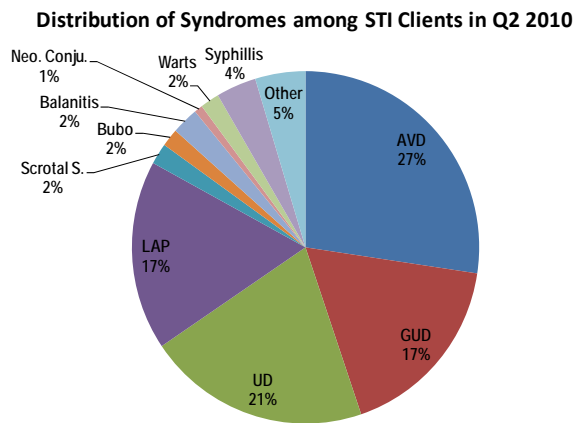
The rate of HIV status ascertainment is still low at STI clinics in Malawi. This is likely due to poor implementation of provider initiated testing and counselling, combined with weak back-referral systems which may lead to incomplete documentation of new HIV test results at the STI clinics. It is worth 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 counselling.

4 STI Syndromes

Figures 1 and 2 show the distribution of STI syndromes among the 44,814 and 46,917 cases presenting to STI clinics in the Q2 and Q3 respectively. Like the last quarter the most common syndrome was abnormal vaginal discharge (AVD) 13,752 (27%) of cases. The distribution of the other syndromes was similar to that of last quarter. Similar to the previous quarter, balanitis, bubo, warts and neonatal conjunctivitis each accounted for 1 – 3% of cases.

¹ 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.

² 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.



Figures 1 and 2: Distribution of Syndromes of the 44,814 STI clients in Q2 and 46,917 clients in Q3 of 2010

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 **10,297 (26%)** of the 39,021 STI clients with unknown or new negative test result were referred for repeat HTC. **1,889 (73%)** of 2,588 clients who were newly tested HIV positive were referred for ART eligibility assessment. This is similar to last quarter (76%), and remains lower than expected.

2010 Q3 STI Report

National coverage

			Population denominator	
Total Number of Clients	46,917		98,604	48%
Gender and Pregnancy				
Males	19,765	42%	37,993	52%
Females	27,152	58%	60,612	45%
Females Non Pregnant	23,562	87%		
Females Pregnant	3,590	13%		
Age				
Age A (<20 years)	4,413	10%	17,323	25%
Age B (20 - 24 years)	11,957	25%	24,952	48%
Age C (25 years and above)	30,575	65%	56,799	54%
Type				
Index cases	36,796	78%		
Partners	10,083	22%		
Asymptomatic	6,343	63%		
Symptomatic	3,740	37%		
Partner Notification				
Partner Slips issued	24,612			
Partners	10,083	41%		
STI History				
Never	32,459	69%		
Old (previous STI >3months ago)	10,108	22%		
Recent (previous STI <3months ago)	4,213	9%		
HIV Status				
HIV status unknown	21,152	45%		
HIV Status ascertained	25,765	55%		
Total HIV negative (new test)	17,869	69%		
Total HIV positive	7,896	31%		
Total new HIV positive	2,588	33%		
Total previous HIV positive	5,308	67%		
Not on ART	2,614	49%		
On ART	2,694	51%		
Syndromes				
Total Syndromes*	50,088			
Abnormal Vaginal Discharge Total	13,752	27%		
Low Risk	5,745	42%		
High Risk	8,007	58%		
Genital Ulcer Disease	9,063	18%		
Urethral Discharge	10,643	21%		
Lower abdominal Pain	8,590	17%		
Scrotal Swelling	1,016	2%		
Bubo	776	2%		
Balanitis	1,230	2%		
Neonatal Conjunctivitis	407	1%		
Warts	823	2%		
Syphilis	1,499	3%		
Other	2,289	5%		
Referrals (multiple possible)				
Repeat HTC ^{&}	10,297	26%		
ART	1,889			
Lab	1,344			
PMTCT	421			
Gynae	714			
Surgical	384			
Other	1,410			

* 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