Government of Malawi Ministry of Health

Integrated HIV Program Report
July - September 2011

- *HIV Testing and Counseling*
- *Post Exposure Prophylaxis*
- *HIV Exposed Child Follow-Up*
- *Pre-ART*
- *Prevention of Mother to Child Transmission / Antiretroviral Therapy*
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1 Executive Summary

This is the first quarterly HIV Program report after implementation of the 2011 Integrated Clinical HIV Guidelines[1] in July 2011. A summary of the key achievements between July and September 2011 is provided below:

- Scale-up of integrated HIV services had reached the following number of sites:
  - **810** HTC sites (547 within and 263 outside of health facilities)
  - **409** (static) ART sites
  - **317** PMTCT sites (Option B+)
  - **225** Pre-ART sites
  - **193** sites with HIV-exposed child follow-up
- **381,816** persons tested and counselled for HIV, 165,580 (43%) of these tested for the first time.
- **120,201 (74%)** of 162,187 women at ANC had their HIV status ascertained; **10,336 (9%)** of these were HIV positive and **8,277 (78%)** of these received ARVs.
- **115,103 (91%)** of 126,514 women at maternity had their HIV status ascertained; **9,192 (8%)** of these were HIV positive and **8,127 (88%)** of these received ARVs during labour.
- **8,509 (8%)** of infants discharged alive from maternity were known to be HIV exposed, **7,758 (91%)** of these received ARV prophylaxis.
- **3,244** women started ART under *Option B+*: **1,847** (52%) were pregnant and **1,394** (48%) were breastfeeding.
- **24,638** patients started ART during this quarter; this is **30% more** than in any other quarter since the start of the ART program in 2004.
- **79%** of adults and **79%** of children were retained alive on ART 12 months after ART initiation.
- **295,962** patients were alive and on ART by end of September 2011; **4,384** (1.5%) were on ART regimen 5A (tenofovir / lamivudine / efavirenz)
- **3,596** HIV exposed children and **8,594** pre-ART patients enrolled for follow-up in *HIV Care Clinics (HCC)*
- **2,856** health workers were trained in the new integrated PMTCT/ART curriculum during Q3, bringing the total number of health workers re-trained in the new guidelines to **3,366**. All training details were captured in the new national HIV training data base (*TrainSMART*) at MOH.
- **266** new HTC providers were trained during Q3 and **25** qualified HTC providers received further skills training in couples counselling.
- **20** new STI providers were trained during Q3.

[1] Available from: http://www.hivunitmohmw.org/uploads/Main/Malawi%20Integrated%20Guidelines%20for%20Clinical%20Management%20of%20HIV%202011%20First%20Edition.pdf

2 Integrated HIV Program Overview

In July 2011, Malawi started implementing a revised HIV Program in all health facilities following the ***2011 Malawi Integrated Clinical HIV Guidelines***. These guidelines were developed in 2010/11 by the PMTCT/ART Technical Working Group led by the Department for HIV and AIDS of the Ministry of Health. Key program policies include:

- **PMTCT Option B+:** universal life-long ART for all HIV infected pregnant and breastfeeding women regardless of clinical or immunological stage.

- Standard **HIV exposed child follow-up** to age 24 months. This program aims to improve early infant diagnosis and ART initiation using DNA-PCR testing for all infants from age 6 weeks; rapid antibody testing is considered diagnostic from age 12 months and repeated at 24 months. HIV exposed child enrolment and follow-up is integrated with maternal ART follow-up (Option B+) to improve retention and adherence.

- **Early ART initiation**: universal ART for children under 2 years (confirmed HIV infection), children 2-4 years with an absolute CD4 count of ≤750 (CD4% no longer required), children over 5 years and adults with a CD4 count ≤350, patients co-infected with HIV and hepatitis B.

- Transition to **more favourable first line ART regimens** for adults (Malawi regimen 5A: tenofovir / lamivudine / efavirenz) and children (Malawi regimen 2: zidovudine / lamivudine / nevirapine), including provision of paediatric ARV formulations for all children under 25kg. Transition to regimen 5A had to be restricted to certain patient groups due to funding limitations.

- Standard **pre-ART services** for all HIV-infected persons not yet eligible for ART. The pre-ART program aims to reduce the incidence of HIV-related diseases and to enable early ART initiation based on the new CD4 cell threshold (350) through scheduled CD4 count monitoring. Malawi had no standard pre-ART program until July 2011, although some sites had already started offering elements of the new standard pre-ART package.

- Provider-initiated provision of **contraceptives and condoms** for all adults in pre-ART and ART clinics to reduce the rate of unwanted pregnancies among HIV-infected adults and to reduce HIV-transmission between sexual partners.

- Isoniazid preventive therapy (**IPT**) for pre-ART patients to reduce the incidence of TB and intensified TB case finding (**ICF**) for all patients in pre-ART and ART follow-up to enable early diagnosis and treatment of TB.

- Roll-out of scheduled **viral load monitoring** to improve early detection of treatment failure and initiation of second line ART.

Implementation of PMTCT Option B+ requires provision of ART services at <u>all</u> health facilities with Maternal and Child Health services. This required a massive acceleration of the **decentralization of ART services** from 303 (static) sites by June 2011 to over 600 sites by end of 2011.

3 Supportive Site Supervision

3.1 Methods

The Department for HIV and AIDS has coordinated quarterly supportive supervision visits to all health facilities with ART services since the start of the national treatment program in 2004. Supervision teams are composed of: experienced HIV clinicians; nurses and M&E staff from health facilities in the public and private sector; district and zonal PMTCT and ART coordinators; program officers and technical staff from the Department for HIV and AIDS; technical staff from implementing partners. The TB and HIV programs are working towards a full integration of their respective site supervision program.

Each quarter, a one day pre-supervision meeting is organised for all supervisors participating in the upcoming round to share program updates, discuss observations from the previous round, distribute materials and organise logistics, transport and accommodation.

Standard supervision forms are used to guide the supervision protocol, to update site information and collect M&E reports. Custom forms with previous data for each site are printed from the HIV Department database. The supervision forms include:

- Contact details of HIV service providers at each site
- Quality of service checklist
- Follow up on action points noted during the previous visit
- Next visit date
- M&E reports from HTC, ANC, maternity, exposed child and pre-ART follow-up, ART and TB
- Physical Drug stock-level assessment
- Identification of sites as priority for Clinical Mentoring programme

One copy of the supervision form is returned to the Department for HIV and AIDS, where data are entered in a custom MS Access database to produce national reports and to manage program logistics and the commodity supply chain. A second copy of the supervision form is left at the sites.

The supervision protocol includes a systematic review and verification of primary records (patient cards and registers) at all sites. This effectively provides a quarterly quality audit for M&E records, which has resulted in exceptional accuracy and completeness of HIV Program data in Malawi. At the same time, the systematic chart review helps to identify complex cases or deviations from clinical protocol, allowing the supervision team to provide targeted mentoring and clinical advice. The quarterly supervision exercise also aims to boost staff morale and motivation through *Certificates of Excellence* that are awarded by MOH to sites with an excellent score on the quality of service checklist. The involvement of a growing number of health workers from sites all over the country who participate in the quarterly supervision exercise has helped to build a strong identity for the national HIV program and has greatly facilitated communication between program staff at the national, zonal, district and facility level.

The HTC Program conducts a separate supportive site supervision exercise each quarter, targeting a sample of HTC sites both within and outside of health facilities. Supervision teams consist of district, zonal and national level HTC coordinators, supported by implementing partners.

3.2 Supervision Outcomes

647 public and private sector facilities were visited for **clinical HIV program supervision** during the last 3 weeks of October 2011. The massive increase in the number of sites included in this supervision round was achieved by expanding the pool of supervisors from 39 to **69**. 16 supervision

teams spent a total of **1,551 working hours** at the sites. Each site visit lasted **2.4** hours on average, but up to 2 days was spent at the busiest sites. **157** clinic teams were awarded a *Certificate of Excellence* for **excellent performance** during the Q3 supervision visit. **170** sites had significant weaknesses and were rated to require **intensive mentoring**. The capacity to provide mentoring visits to these many sites will need to be established over the next months.

Table 1: Outcomes of integrated HIV services supervision for 2011 Q3

Zone	Total facil. visited*	Supervision hours spent at facilities		Performance (# and % of sites)	
		Total	Average per site	Excellent perform.	Mentoring needed
NZ	116	224	1.9	23 20%	44 38%
CEZ	94	248	2.7	25 27%	20 21%
CWZ	146	359	2.5	28 19%	27 18%
SEZ	146	363	2.5	38 26%	63 43%
SWZ	146	358	2.5	43 29%	16 11%
Malawi	648	1,552	2.4	157 24%	170 26%

* includes facilities that were visited for assessment of readiness, but that may have not (yet) been designated to provide integrated HIV services.

Table 1 provides a summary of the supervision outcomes by zone. Most facilities were using the standard national M&E tools, but 24 high burden sites were using the standard electronic data system for ART (EDS). Some NGO supported sites were using custom tools compatible with the national standard reporting requirements.

A total of **248** sites in all 5 zones were visited for supportive **HTC site supervision** during Q3 2011. Almost all sites visited had adequate numbers of HTC providers, most had adequate quantities of reagents and HTC Guidelines were available in the HTC rooms. Many sites had participated in proficiency testing during this quarter. There were similar challenges in all 5 zones, related to the need for more consistent supervision at the district level. Many HTC providers needed refresher trainings and sites needed updated IEC materials and stop watches. A proportion of counsellors had not received feedback from the proficiency testing exercise.

4 Inventory of Sites and Services

Table 2: Facilities with integrated HIV services in the 5 Zones. Availability of services defined by performance (at least 1 patient enrolled) during 2011 Q3

Zone	Total fac.(1)	Facilities providing HIV services				CD4 count machines (2)		
		Exp. child	Pre-ART	PMTCT B+	ART	Installed	Functional	Results
NZ	103	37 36%	42 41%	49 48%	60 58%	9 9%	7 78%	1,322
CEZ	83	28 34%	26 31%	38 46%	44 53%	10 12%	7 70%	1,229
CWZ	116	29 25%	39 34%	56 48%	86 74%	18 16%	17 94%	6,714
SWZ	126	54 43%	73 58%	82 65%	114 90%	16 13%	12 75%	20,336
SEZ	128	44 34%	44 34%	90 70%	105 82%	17 13%	13 76%	8,529
Malawi	556	192 35%	224 40%	315 57%	409 74%	70 13%	56 80%	38,130

(1) Total facilities in the public / private sector designated to provide integrated HIV services in this quarter. Individual site selection is reviewed and may change each quarter.

(2) CD4 machines that have produced at least 1 result during the reporting period are defined as functional.

A total of **810** sites were reported to be providing HTC services in Q3 2011 and **263** of these were outside of health facilities. In addition, HTC is provided as mobile, door-to-door and community-based testing.

Table 2 shows the distribution of the **556** sites designated to provide clinical HIV services in Q3 2011, by zone. At the national level, there were **409** (static) sites with at least one patient on ART, **315** sites had enrolled women under PMTCT Option B+; **224** sites were providing pre-ART services and **192** had enrolled HIV

exposed children for follow-up. The South West Zone had achieved the highest ART site coverage (90% of designated sites) while the South East Zone had reached the highest proportion of sites that had started providing PMTCT Option B+ (70%).

CD4 count machines were installed at **70** sites, but only **56 (80%)** of these had produced at least 1 result during Q3. The total number of CD4 results produced during Q3 was **38,130** and more than half of this output was from the South West Zone, implying that many CD4 machines were running considerably below capacity.

5 HIV Testing and Counselling Program Outputs

381,816 people were tested and counselled for HIV between July and September 2011. This represents a 25% decrease from the previous quarter which was caused by wide-spread stock outs of HIV test kits at the sites (see page 19 for further supply chain details). **41,195 (11%)** of all people tested were HIV positive.

Out of **381,816** people tested and counselled, **33%** were males and **67%** were females. Among females, **48%** were pregnant and **52%** were not pregnant.

54% of all people tested and counselled were 25 years and above, **38%** were between 15-24 years and **7%** were children below 15years.

69,541 (18%) accessed HTC with their partners (as a couple).

197,885 (39%) of 509,645 people tested and counselling accessed HTC for the first time in their life. Based on the cumulative number of people who accessed HTC for the first time, a total of **3,467,398** people were tested since introduction of the 'first time HTC access' indicator in July 2007.

Detailed HTC service data are shown in the **Annex**.

6 Post Exposure Prophylaxis (PEP)

A total of **515** persons received PEP during Q3 2011. This constitutes a two-fold increase from the previous quarter (254). The rate of increase was similar in all 5 zones and was mainly driven by a significantly higher uptake of PEP at many sites, likely due to the re-training of health workers in the 2011 Integrated Clinical HIV Curriculum which includes a streamlined PEP protocol. Inclusion of more sites in this supervision round also resulted in more complete data collection.

7 Provider-Initiated Family Planning (PIFP)

The 2011 Integrated Clinical HIV Guidelines encourage health workers to routinely provide condoms to all adults in pre-ART and ART clinics. Women should also be able to receive at least the standard injectable contraceptive (Depo-Provera) during any pre-ART or ART visit. This policy aims to address the significant unmet need for family planning that had been observed among HIV patients in Malawi and to reduce the number of unwanted pregnancies among HIV-infected women (***PMTCT Prong 2***). HIV program reporting on PIFP is limited women who received an injection of Depo-Provera in pre-ART and ART clinics during the last quarter. Reporting does not account for family planning need nor does it include women who accessed family planning from elsewhere.

Table 3: Number and % of women retained in HIV care * who were on injectable contraceptives (Depo) by the end of 2011 Q3.

Zone	Pre-ART			ART			Both patient groups		
	Tot. women	On Depo		Tot. women	On Depo		Tot. women	On Depo	
NZ	618	**1**	*0%*	16,958	**38**	*0%*	17,575	**39**	*0%*
CEZ	382	**48**	*13%*	14,157	**1,330**	*9%*	14,540	**1,378**	*9%*
CWZ	627	**19**	*3%*	34,377	**1,613**	*5%*	35,005	**1,632**	*5%*
SEZ	1,150	**261**	*23%*	41,623	**8,124**	*20%*	42,772	**8,385**	*20%*
SWZ	1,192	**267**	*22%*	57,584	**1,584**	*3%*	58,777	**1,850**	*3%*
Malawi	3,970	**596**	*15%*	164,699	**12,689**	*8%*	168,669	**13,285**	*8%*

* estimated from the total number of patients retained in pre-ART and ART, multiplied by the proportions of females and adults registered

Table 3 shows that only **13,285 (8%)** women received Depo-Provera from HIV clinics in Q3 2011. The absolute number and proportion of women on Depo was highest among ART patients in the South East Zone **(8,124; 20%)**.The overall number of women in pre-ART follow-up was still very low (3,970) and only 596 (15%) of these had received Depo-Provera. A considerable increase in PIFP provision and uptake is expected over the next few quarters.

8 Cotrimoxazole Preventive Therapy (CPT)

All patients in HIV care are universally eligible for CPT in order to reduce the frequency and severity of several HIV-related diseases. Patients with confirmed HIV infection are provided lifelong CPT in pre-ART and ART clinics. CPT is also given to HIV exposed children until exposure to breast milk has stopped and HIV infection has been ruled out (usually around age 24 months). Fewer than 5% of patients are expected to require stopping of CPT due to toxicity.

Table 4 shows that **269,937 (88%)** of all HIV patients in Q3 2011 were on CPT. At the national level, CPT coverage was similar among pre-ART and ART patients (88%), but lower among HIV exposed children (56%). The Central East Zone reported the lowest CPT coverage among pre-ART and ART patients. This and the overall slight decline in CPT coverage compared to the previous quarter was due to ruptures in the supply of cotrimoxazole for the general health services, leading to stock-outs of the cotrimoxazole supplied for HIV patients.

Table 4: Number and % of patients retained in HIV care who were on cotrimoxazole and isoniazid preventive therapy (CPT, IPT) by the end of 2011 Q3.

Zone	CPT									IPT		
	Exp. child			Pre-ART			ART			All patient groups			Pre-ART		
	Tot. pat.	On CPT		Tot. pat.	On CPT		Tot. pat.	On CPT		Tot. pat.	On CPT		Tot. pat.	On IPT	
NZ	452	**98**	*22%*	1,373	**1,035**	*75%*	31,584	**30,235**	*96%*	33,409	**31,369**	*94%*	1,373	**0**	*0%*
CEZ	386	**247**	*64%*	862	**476**	*55%*	25,934	**15,661**	*60%*	27,182	**16,383**	*60%*	862	**0**	*0%*
CWZ	707	**251**	*36%*	1,344	**1,324**	*98%*	63,228	**56,745**	*90%*	65,279	**58,320**	*89%*	1,344	**0**	*0%*
SEZ	955	**630**	*66%*	2,160	**2,074**	*96%*	70,943	**62,940**	*89%*	74,058	**65,644**	*89%*	2,160	**0**	*0%*
SWZ	1,063	**760**	*71%*	2,390	**2,234**	*93%*	103,298	**95,228**	*92%*	106,751	**98,222**	*92%*	2,390	**0**	*0%*
Malawi	3,563	**1,985**	*56%*	8,129	**7,143**	*88%*	294,987	**260,809**	*88%*	306,679	**269,937**	*88%*	8,129	**0**	*0%*

9 TB / HIV Interventions

9.1 Intensified Case Finding (ICF)

TB is one of the most important HIV-related diseases in Malawi and a considerable proportion of (mainly early) deaths on ART are attributed to undiagnosed TB. ICF is carried out using a standard symptom checklist at every HIV patient visit. ICF outcomes are documented on HIV exposed child, pre-ART and ART patient cards, but routine M&E reporting is currently limited to ART patients in order to reduce the burden of reporting secondary cohort outcomes. It is assumed that implementation of ICF is similar in pre-ART and exposed child follow-up.

263,216 (89%) of all patients retained on ART were screened for TB at their last visit before end of September 2011. **366 (<1%)** were suspected and investigated for TB and **2,021 (1%)** had confirmed TB (clinical or lab based). Out of these, **1,600 (79%)** were confirmed to be on TB treatment and **421 (21%)** had not yet started or had interrupted TB treatment. Data are shown in the **Annex** (*Cumulative ART outcomes*).

9.2 Isoniazid Preventive Therapy (IPT)

All pre-ART patients with a negative screening outcome for TB symptoms are eligible for IPT. The first (large scale) procurement of isoniazid and pyridoxine for the HIV programs has been delayed and implementation of IPT is expected to start in Q2 2012.

10 HIV-Related Diseases

Table 5 shows the number of patients treated for 4 key HIV-related indicator diseases (data from TB, ART and Diflucan registers or ART treatment cards). The number of new TB cases increased from 5,000 in Q2 to **5,207** in Q3 2011 while the HIV ascertainment rate continued to decline (from 89% in Q4 2010 to **83%** in Q3 2011). This was probably caused by HIV test kit supply ruptures. **65%** of TB patients whose HIV status was ascertained were positive and **49%** of these were already on ART when starting TB treatment. The increase in the number and proportion already on ART may be due to the scale-up of intensified active TB case finding (ICF) in ART clinics, resulting in increased the TB case detection rates among ART patients. Oesophageal candidiasis (OC) and cryptococcal meningitis (CM) cases both decreased from the previous quarter. This is probably due to a decline in reporting, which is linked to the availability of fluconazole, rather than due to an actual reduction in incidence of these conditions.

Table 5: Number new cases of key HIV-related diseases registered per quarter (KS = Kaposi Sarcoma, CM = cryptococcal meningitis, OC = oesophageal candidiasis).

	TB				KS *	CM *	OC *
	Tot. cases	HIV status asc.	HIV positive	Already on ART	Tot. cases	Tot. cases	Tot. cases
2010 Q4	5,358	4,754 *89%*	3,123 *66%*	1,252 *40%*	546	374	834
2011 Q1	5,008	4,372 *87%*	2,813 *64%*	1,221 *43%*	590	209	744
2011 Q2	5,000	4,243 *85%*	2,827 *67%*	1,273 *45%*	468	392	481
2011 Q3	5,207	4,344 *83%*	2,837 *65%*	1,381 *49%*	540	218	426

11 HIV-Exposed Child Follow-Up

11.1 Methods and Definition of Indicators

There are multiple entry points into HIV exposed child follow up: children of HIV infected mothers may be enrolled at birth at maternity; they may be found at Under 1 or Under 5 Clinics through active screening for HIV exposure; they may be identified when presenting sick to OPD; or they may be seen with their mothers in ART follow-up. Although the targeted enrolment age is below 2 months, children may theoretically be enrolled up to 23 months of age (when HIV infection can be ruled out by rapid antibody test and breast milk exposure is likely to have stopped).

Initial registration data and details for every visit are recorded on an *Exposed Child Patient Card* and a subset of the registration data is copied in the *HIV Care Clinic (HCC) register* (one record per patient). Registration data are reported from the HCC register on a quarterly basis. Follow-up outcomes are reported monthly, selecting children who were **2, 12 and 24 months** old in the respective reporting month. Outcomes are determined from the latest visit details recorded on each card. HIV infection status is evaluated as ***known negative*** if a negative DNA-PCR or rapid test result was available at the last visit; HIV infection status is evaluated as ***known positive*** if a positive DNA-PCR result was available at any age or a positive rapid antibody test was available from age 12 months; HIV infection status is counted as ***unknown*** if HIV infection has not been confirmed and/or a negative test result pre-dated the last visit (assuming on-going HIV exposure through breast milk). All children under 24 months with confirmed HIV infection and those under 12 months with confirmed HIV antibody and symptoms of *presumed severe HIV disease* are ***eligible for ART***.

The main outcome indicator for the HIV exposed child follow-up program is ***HIV-free survival at 24 months of age***. This is defined as the proportion of children who were discharged as confirmed uninfected by the age of 24 months.

11.2 HIV Exposed Child Registration Data

This is the first quarterly report from the new standard follow-up program for HIV exposed children and the data should be regarded as preliminary: **3,596** HIV exposed children were registered during Q3 2011. Only **922 (25%)** of these were enrolled under the age of 2 months.

11.3 Birth Cohort Outcomes

There were **841** infants in the **2 month age cohort**. **390 (46%)** had received a DNA-PCR result and **19 (5%)** of these were confirmed HIV infected. An additional **7** infants were diagnosed with *presumed severe HIV disease,* which means that a total of **26** infants were eligible for ART. **18 (69%)** of these had started ART. Out of the entire 2-month age cohort, **818 (96%)** were retained in exposed child follow-up, **18 (2%)** had started ART and **12 (1%)** were discharged confirmed uninfected[2]. No infant in this age cohort was known to have died or been lost to follow-up.

There were **539** children in the **12 month age cohort**. Current HIV infection status was known for **375 (70%)** children (DNA-PCR or rapid antibody test) and **40 (11%)** of these were confirmed HIV infected. **1** additional child had been diagnosed with *presumed severe HIV disease,* which means that a total of **41** children were eligible for ART. **39 (95%)** of these had started ART. Out of the entire age cohort, **462 (86%)** were retained in exposed child follow-up, **39 (2%)** had started ART and **25 (5%)** were discharged confirmed uninfected[2]. **6 (1%)** were lost to follow-up and **5 (1%)** had died.

[2] A small number of children may be rightfully discharged as 'confirmed uninfected' by 2 or 12 months of age, provided that HIV exposure through breast milk has definitely stopped (e.g. maternal death) and a negative HIV test was obtained at least 6 weeks thereafter.

There were **304** children in the **24 month age cohort**. Current HIV infection status was known for **280 (89%)** children (DNA-PCR or rapid antibody test) and **33 (12%)** of these were confirmed HIV infected. **1** additional child had been diagnosed with *presumed severe HIV disease,* which means that a total of **34** children were eligible for ART. **30 (88%)** of these had started ART. Out of the entire age cohort, **148 (47%)** were retained in exposed child follow-up, **30 (10%)** had started ART and **108 (35%)** were discharged confirmed uninfected[2]. **18 (6%)** were lost to follow-up and **9 (3%)** had died.

This would imply that ***HIV-free survival*** in this quarter was only **35%**, raising questions about the validity of this first report. Given that **247** children were classified as *confirmed not infected* but only **148** as discharged, it is likely that up to 100 additional children should have been included in the group of *HIV-free survival*.

12 Pre-ART

This is the first quarterly report from the new standard pre-ART follow-up program and the data should be regarded as preliminary.

12.1 Pre-ART Registration Data

A total of **8,594** patients were newly registered for pre-ART follow-up in Q3 2011. **715 (8%)** of these were children aged 2-14 years. Several sites had already established pre-ART services before July 2011, but the cumulative number of pre-ART patients ever registered (8,551) was actually slightly lower than the new registrations in this quarter. This error is due to incomplete reporting of cumulative pre-ART data from some sites. It is expected that the completeness and accuracy of pre-ART reporting will improve as the system gets established at all sites over the next quarters.

12.2 Cumulative Pre-ART Follow-up Outcomes

8,129 (95%) of all patients ever registered were retained in pre-ART follow-up by the end of Q3 2011; **394 (5%)** had started ART; **1 (<1%)** had been lost to follow-up; **10 (<1%)** were known to have died. The large proportion of patients retained in pre-ART and the small number of patients who started ART is explained by the fact that the pre-ART program was only established within Q3 2011 at most sites.

7,143 (88%) of patients retained in pre-ART were on CPT. **596 (15%)** of 3,970 women had received Depo-Provera from their pre-ART clinic. The implementation of IPT for pre-ART patients is expected to start by mid 2012. This is due to delayed procurement of isoniazid and pyridoxine for the IPT program. Further details on CPT, Depo-Provera and IPT are presented in **Tables 3 and 4** in the respective sections above.

13 PMTCT / ART

The implementation of ***PMTCT Option B+*** has effectively integrated PMTCT and ART services. The program aims to initiate lifelong ART for all HIV infected women as early as possible from the 2nd trimester of pregnancy. ART may be started and continued at ANC, labour and delivery, and at ART clinics. All infants born to HIV-infected women are supposed to start daily nevirapine prophylaxis for the first 6 weeks of life. Nevirapine syrup is given to women at the earliest opportunity to take home with instructions how to give it to the new-born.

13.1 Data Sources and Reporting Methods

All patients starting ART are recorded using standard program monitoring tools (ART patient treatment cards and ART clinic registers). **ART baseline data** for all patients registered are reported each quarter from ART clinic registers. **ART outcomes** of all patients ever registered are reported after reviewing the cards of all new patients and of those who were on ART at the end of the previous quarter, updating the status of patients who have subsequently died, stopped or been lost to follow-up. Secondary outcomes such as current regimen, CPT status, side effects, adherence and TB status are reported for all patients retained on ART.

ART scale-up has resulted in a growing proportion of HIV-infected women who are already on ART when becoming pregnant. Implementation of *Option B+* will further increase ART coverage in this group. The ART program only captures pregnancy (and breastfeeding) status at the time of *ART initiation.* The quarterly ART report thus provides information on the number of new women starting ART while pregnant (or while breastfeeding), but total **maternal PMTCT coverage** should be estimated from the number of pregnant women who were on ARVs at the end of pregnancy. This information is available from **ANC cohort reports** that are based on women's final status at their last ANC visit and include women already on ART when becoming pregnant and on those who started ART during their current pregnancy. Over 95% of pregnant women in Malawi attend ANC and ANC reports therefore provide almost complete data for the whole pregnant population. **Infant PMTCT coverage** is estimated from maternity reports, based on the number of infants born to known HIV-infected women and discharged alive who started nevirapine prophylaxis. Only about 70% of women deliver at a health facility in Malawi and maternity reports are therefore likely to underestimate the total infants receiving ARV prophylaxis.

New standard M&E tools for ANC and maternity were implemented in Malawi in January 2010 and revised tools will be distributed in 2012 to reflect the new PMTCT policy. ANC and maternity clinic registers and reporting forms include patient management information as well as all relevant data elements for M&E of the maternal and child health and HIV programs. The 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 cohort reporting system is designed to aggregate women's outcome data after they have completed their ANC visits. Data from ANC and maternity are collated and presented separately because records do not allow identification of individual women and hence are subject to double counting if not separated.

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

13.2 HIV Services at ANC

The full national data from ANC are presented in the **Appendix**.

160,917 women attended ANC for their first visit between July and September 2011. This number exceeds the expected 151,750 pregnant women in the Malawian population during one quarter and is likely explained by a considerable number of women from neighbouring countries who access health services in Malawi.

The following report covers the outcomes of the **162,187** women who started ANC between January and March 2011 and who had finished ANC by September 2011. **16,521 (10%)** of women started ANC in their first trimester. **46,415 (29%)** of women were tested for syphilis at ANC and

1,417 (3%) were syphilis positive. The syphilis testing rate remained similarly low as in the previous quarter. The total number of visits for the cohort under review is **415,026**. Only **22%** of women in this cohort attended the minimum of 4 focussed ANC visits.

13.2.1 HIV Ascertainment at ANC

120,201 (74%) of ANC attendees had their HIV status ascertained. Out of these, **7,906 (7%)** presented with a valid documented previous HIV test result and **112,295 (93%)** received a new HIV test result at ANC. A total of **10,307 (9%)** women were found HIV positive. This is lower than the estimated 12% HIV prevalence among pregnant women and this is likely due to problems with sensitivity of HIV rapid testing in high volume service provision settings.

The **120,201** women whose HIV status was ascertained at ANC represent **79%** of the expected 151,750 pregnant women in the population. The rate of HIV status ascertainment at ANC has increased slightly from the last quarter.

13.3 ARV Coverage at ANC

8,277 (78%) of HIV infected women attending ANC received maternal ARVs. This represents **45%** coverage of the estimated 18,210 HIV positive pregnant women in the population in this quarter (12% of 151,750). This is an increase from the previous quarters is partly due to the higher degree of data completeness.

Of the **8,277** women who received any ARVs, **1,525 (18%)** were given a single tablet of nevirapine to take home and **4,324 (52%)** were started on AZT combination regimen.

6,905 (67%) of 10,307 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. **2,627 (38%)** were found eligible and **2,428** were on ART during their ANC follow-up. With implementation of the new guidelines in July 2011, all HIV-infected pregnant women were universally eligible for ART. More than half of women in this cohort were still on one of the previous prophylactic PMTCT regimens. This is explained by the 6-month ANC cohort reporting period which started before the changeover to the new guidelines.

8,966 (85%) of HIV infected women at ANC were on Cotrimoxazole Preventive Therapy.

1,048 (10%) of HIV infected women attending ANC received the infant dose of ARVs (nevirapine syrup) to take home.

13.4 HIV Services at Maternity

The full national data from maternity are presented in the **Appendix**.

Between July and September 2011, **119,983** women were admitted for delivery to maternity. This is equivalent to **79%** of the expected 151,750 deliveries in the population during the quarter. Out of all admissions, **117,644 (95%)** delivered at health facilities, while **5,561 (5%)** had already delivered before reaching a facility. This exceeds the 72% expected facility deliveries estimated in the 2010 DHS and indicates a high level of data completeness. This was achieved through the inclusion of ANC and maternity reports in active data collection during the quarterly **site supervision exercise**, which now covers virtually all sites with MCH services.

A total of **113,715 (94%)** deliveries were conducted by skilled birth staff, **1,546 (1%)** by paramedical staff and **5,160 (4%)** were not attended by any of the above (probably mainly among women who

delivered before reaching maternity). **12,672 (10%)** of women developed obstetric complications. The most common leading complications were obstructed / prolonged labour (**4,340 cases, 34%**) and haemorrhage (**1,984 cases, 16%**). A total of **123,243** babies were born, **117,466 (95%)** were singletons and **5,777 (5%)** were twins/multiples. There were **120,833 (98%)** live births and **2,322 (2%)** stillbirths. **119,707 (99%)** of babies born alive were discharged alive and **1,126 (1%)** died before discharge. **120,150 (>99%)** of women were discharged alive and **169 (<1%)** women died before discharge, which is equivalent to a maternal mortality ratio of 140 per 100,000 live births among women attending maternity.

13.4.1 HIV Ascertainment at Maternity

115,103 (91%) women had their HIV status ascertained at maternity. Out of these, **110,660 (96%)** presented with a valid previous HIV test result and **4,443 (4%)** received a new HIV test result. A total of **9,192 (8%)** women were HIV positive and **105,911 (92%)** were negative. The **115,103** women whose HIV status was ascertained at maternity represent **76%** of the expected 151,750 women delivering in the population.

HIV exposure status was ascertained for **110,180 (92%)** out of 119,707 babies born and discharged alive. **8,509 (8%)** of these were born to a known HIV positive mother.

13.4.2 ARV Coverage at Maternity

A total of **8,127 (88%)** of HIV infected women attending maternity received ARVs during labour. This is a further increase from the previous quarter. Out of these, **3,989 (49%)** received the labour dose of AZT combination regimen, **1,291 (15%)** received single dose nevirapine and **2,919 (36%)** were on ART. **7,361 (80%)** women were already taking ARVs during pregnancy: **4,168 (57%)** of these were on AZT combination regimen and **3,193 (43%)** were on ART (lifelong triple therapy). AZT and ART should be taken for more than 4 weeks during pregnancy to ensure optimal effectiveness. **2,914 (70%)** of women on AZT and **2,778 (87%)** of women on ART had received the respective regimen for over 4 weeks during pregnancy.

A total of **7,758 (91%)** of infants who were known HIV exposed and discharged alive received ARV prophylaxis at maternity. This represents **43%** coverage of the estimated 18,210 HIV exposed infants born in the population in this quarter (12% of 151,750). **2,020 (26%)** HIV exposed infants received nevirapine and **5,738 (74%)** started AZT combination regimen. **3,644 (64%)** of infants on AZT combination regimen received nevirapine + AZT syrup and **2,094 (36%)** received only AZT syrup.

14 ART Access and Follow-Up Outcomes

The full national data from the ART Program are shown in the **Annex**.

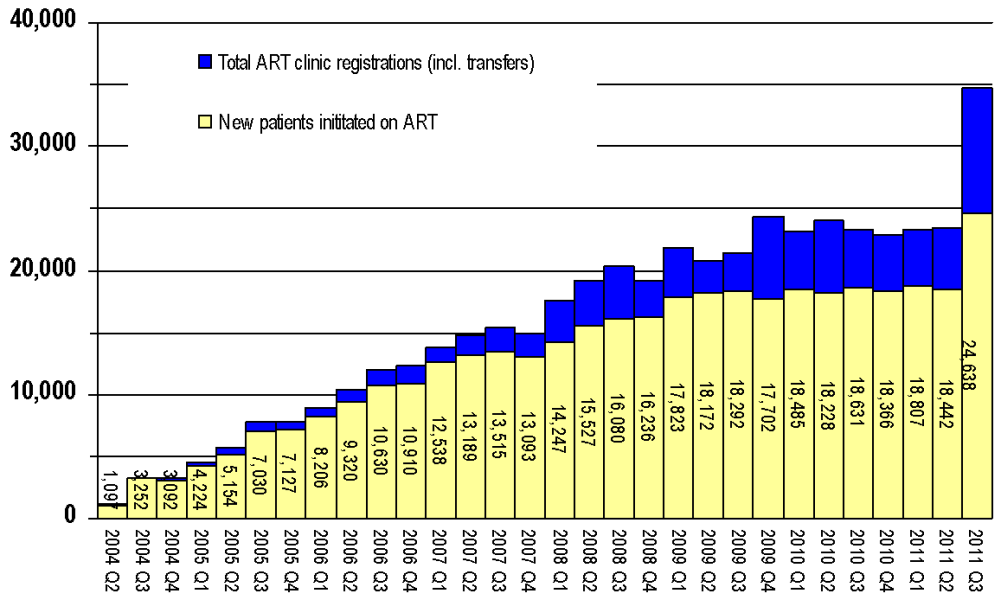
14.1 New ART Registrations during Q3 2011

By the end of September 2011, there were **409 static ART sites** in Malawi, managed by government, mission, NGOs and the private sector. Out of these, **67** were ART facilities in the private sector, charging a nominal MK500 per monthly prescription of drugs per patient.

Implementation of the 2011 Integrated Clinical HIV Guidelines started in July 2011 and has resulted in the unprecedented number of **24,638** new ART initiations during this quarter (see **Figure 1**). The establishment of many new static sites also caused a wave of transfers between sites: **9,966** patients transferred between clinics (**29%** of the total **34,717** new ART clinic registrations). Among all new registrations **35%** were males and **65%** females. **3,561 (16%)** of all females were pregnant and **1,847 (52%)** of these were started under ***Option B+*** in WHO stage 1 or 2, independent of their CD4 count. The remainder of pregnant women were otherwise eligible for ART, either due to WHO stage 3 or 4 conditions or because of a CD4 count <350. A further **1,394** women in WHO stage 1 or 2 were started because of breastfeeding, bringing the total number of women started under ***Option B+*** [3] to **3,241**. The number of pregnant women started on ART is expected to increase considerably over the next few quarters, while the number of breastfeeding women is expected to increase initially and then decline as many sites will have caught up with initiating HIV positive breastfeeding women who delivered before the policy change.

Figure 1: Patients newly inititated on ART and total ART clinic registrations per quarter

Total ART clinic registrations include patients who transferred between sites. This results in double counting of patients at the national level. For 'patients newly initiated on ART' every patient is only counted once.



A total of **14,893** patients **(43%)** started in WHO stage 1 or 2. This is the highest proportion of early ART initiations in any quarter since the start of the program resulting from the implementation of the new guidelines (raised 350 CD4 threshold, Option B+, universal ART for HIV-infected children aged 12-23 months). The on-going roll-out of the national pre-ART program with scheduled CD4 count monitoring is expected to lead to a further increase in early ART initiations. **16,189 (47%)** of patients registered in Q3 started in WHO stage 3 and **2,872 (8%)** started in stage 4 (a decrease from 10% in Q2).

[3] Universal ART for all HIV infected pregnant and breastfeeding women in WHO stage 1 or 2, independent of CD4 count

The total number of children registered increased from 2,256 in Q2 to **2,986** in Q3. **131** children were registered under the policy of universal ART for children aged 12-23 months in WHO stage 1 or 2, independent of CD4 count. A small increase was also noted for children with presumed severe HIV disease (from 140 in Q2 to **152** in Q3) and infants in WHO stage 1 or 2 with confirmed HIV infection through DNA-PCR (from 199 in Q2 to **215** in Q3). Paediatric ART access is expected to further accelerate as implementation of the new guidelines over the next few quarters continues.

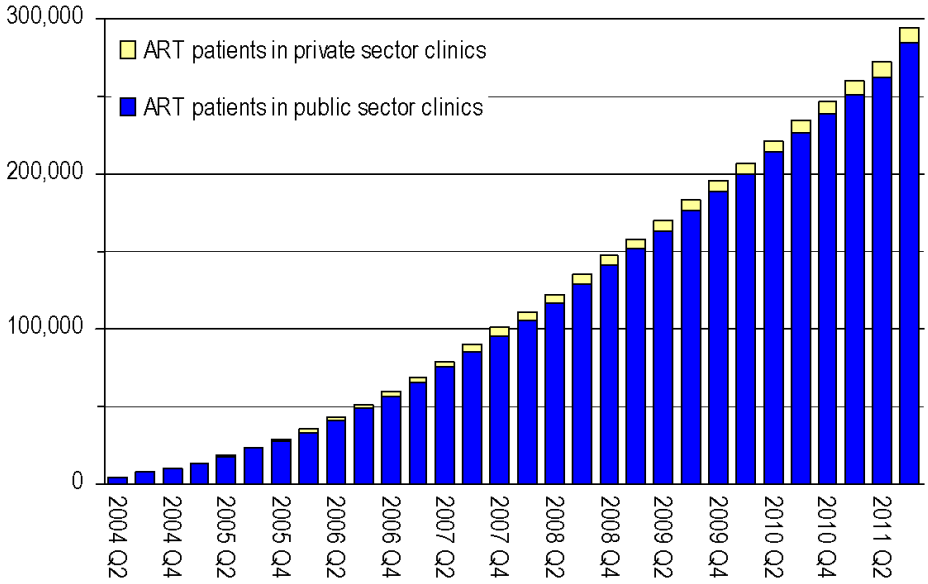
2,447 (7%) out of all ART clinic registrations were patients with TB: **1,282** had a current and **1,165** a recent history of TB. **540 (2%)** of patients registered had Kaposi' sarcoma.

14.2 Cumulative ART Registrations up to September 2011

By the end of September 2011, there were a cumulative total of **488,845** clinic registrations, representing **409,097 (84%)** patients who newly initiated ART and **79,222 (16%)** patients on ART who transferred between clinics. **525** (<1%) out of all clinic registrations were patients who re-initiated ART after treatment interruption. Out of all ART clinic registrations, **39**% were males and **61**% were females, **91**% were adults and **9**% were children (<15 years). Private sector clinics accounted for **17,946** (3.7%) of total patient registrations.

14.3 ART Outcomes

Figure 2: Patients alive on ART in public and private sector clinics in Malawi



By the end of September 2011, a total of **295,962 patients were alive on ART**. This number includes **1,425** patients who were assumed to be 'in transit' as of the 31st September 2011, based on the difference between **80,647** patients *transferred out* and **79,222** 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.

Out of the **409,097** patients ever initiated on ART, **295,962 (72%)** were retained alive on ART, **46,606 (11%)** had died, **64,897 (16%)** were lost to follow-up (defaulted) and **1,991** (<1%) were known to have stopped ART. An estimated **269,048** adults and **26,941** children (<15 years) were alive on ART by the end of September 2011.

Figure 2 shows the increase of patients alive on ART by the end of each quarter. The number of patients alive on ART **increased by 19,065** in Q3 of 2011. This unprecedented growth is a result of the implementation of Option B+ for PMTCT and the raised CD4 count threshold for ART eligibility. Implementation of revised integrated PMTCT/ART guidelines is expected to further accelerate growth of the ART patient cohort. The workload at individual sites is expected to remain manageable due to the massive on-going decentralization to over 300 new sites.

Figure 3 shows the considerable decrease of ART drop-out rates since the start of the national programme. During Q3 2011, there were **2,218** new deaths, **4,334** new defaulters, **567** new ART stops (and **122** new ART re-initiations). This translates into a quarterly death rate of **0.7%** and a defaulter rate of **1.4%** among the patients alive and on treatment during this quarter. By end of September 2011, a cumulative **46,606 (11%)** patients were known to have died **64,897 (16%)** were lost to follow-up and **1,991** (**<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.

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)

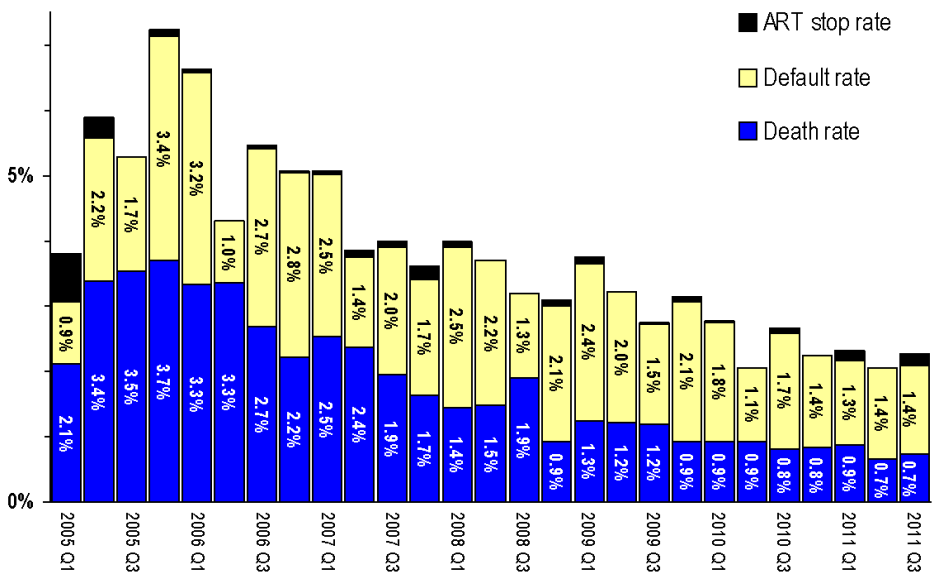


Figure 4: Patients starting ART in WHO stage 4 and deaths in the first 3 months after ART initiation. (Shown as proportions among new patients registered each quarter)

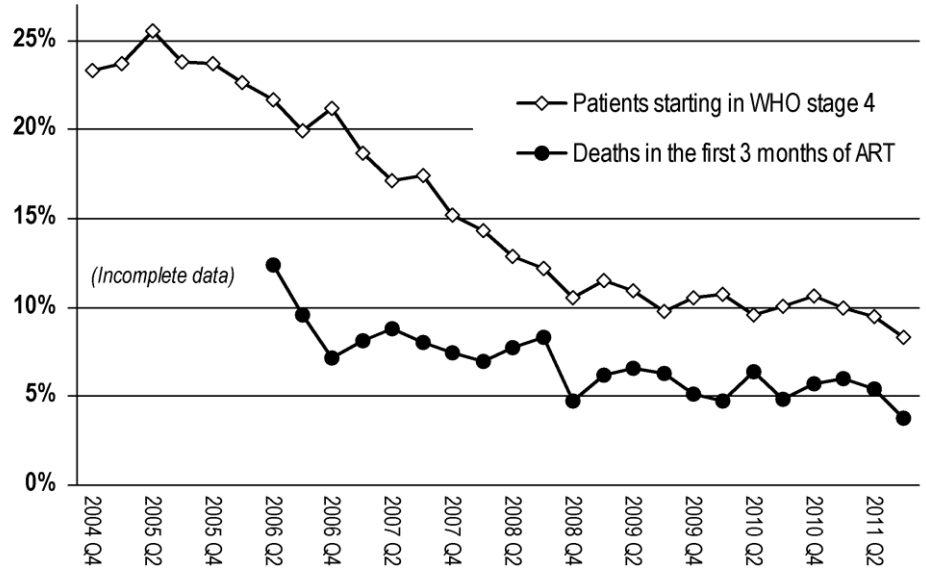
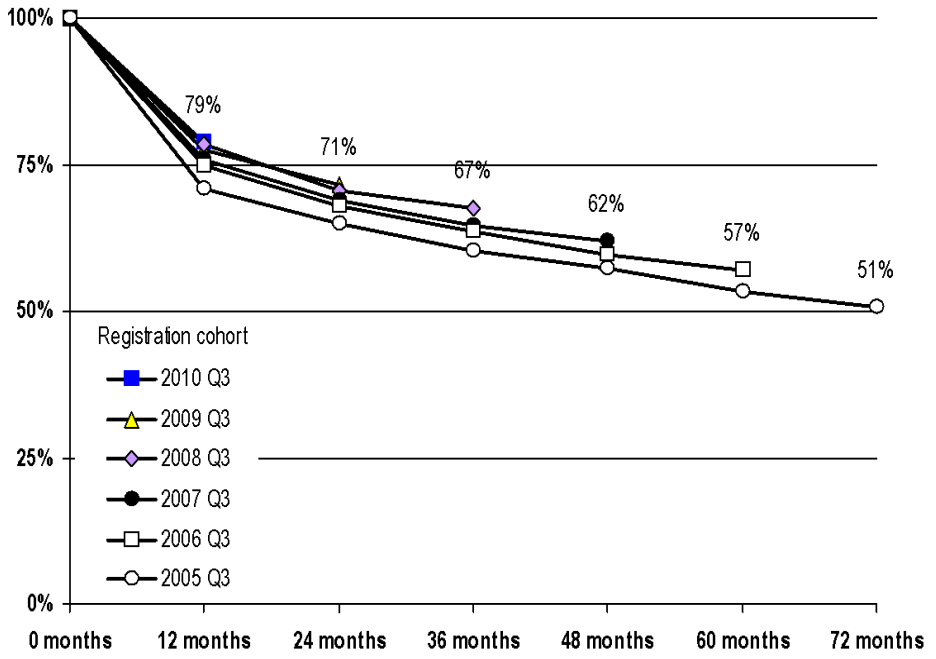


Figure 4 shows the considerable decline in **early mortality** since the start of the program. In 2006 Q2, 11% of new patients died within the first 3 months after ART initiation. Early mortality has declined to the lowest value since the start of the program (**3.8%** in Q3 2011). This correlates well with the decline in the proportion of patients starting ART in WHO clinical stage 4 from 25% in 2005 Q2 to **8.3%** in Q3 2011. 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 more patients will be started in WHO stage 1 and 2 (universal ART for HIV infected pregnant and breastfeeding women and children under 2 years).

At the time of publication of this report, revised epidemiological projections for the population in need of ART (based on the changed eligibility criteria) were not available and estimates for ART population coverage are therefore not presented.

14.3.1 ART Cohort Survival Analysis

Figure 5: Group cohort survival analysis: Proportion of patients retained alive on ART 12, 24, 36, 48, 60 and 72 months after ART initiation



A 12, 24, 36, 48, 60, 72 and 84-month **'cohort outcome survival analysis'** was conducted for patients registered in Q3 of 2005, 2006, 2007, 2008 2009 and 2010, 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 2010. **79% of adults** and **79% of children** were retained alive on ART after 12 months on treatment. This is a slight decrease from 81% in children and from 80% in adults in the previous quarter. **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%.

14.3.2 Secondary outcomes of patients retained on ART

Secondary outcomes are known for the **294,537** patients alive on ART who remained at their sites at end of the quarter. They are not known for 1,425 patients *in transit*.

ART Regimens

288,404 (98%) of patients were on first line and **1,100 (<1%)** were on second line regimens; **5,033 (2%)** were on non-standard regimens. Non-standard regimens 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.

Among patients on first line regimens, **10,494 (4%)** were on paediatric formulations and only **3,002 (29%)** of these were on the new standard first line for children (regimen 2P: AZT/3TC/NVP). Over the next few quarters, it is expected that about 9% of all first line patients will be moved to paediatric formulations and over 90% of these will receive regimen 2P.

246,782 (89%) of 277,910 patients on adult formulation first line regimen were on regimen 1A (stavudine / lamivudine / nevirapine); **19,533 (7%)** were on regimen 2A (zidovudine / lamivudine / nevirapine), which is the main alternative regimen for patients with stavudine toxicity.

By the end of September 2011, **4,384** patients were receiving ART regimen 5A (tenofovir / lamivudine / efavirenz). The majority of these were new initiations under Option B+ or because of concurrent TB treatment. Only a minority were substituted to regimen 5A due to confirmed lipodystrophy or other severe ART side effects.

Adherence to ART

Pill counts and the number of missed doses were documented for **248,549 (84%)** out of all patients retained on ART and **223,575 (90%)** of these were classified as >95% adherent in Q3 2011. 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. Most ART sites are now recording this measure consistently.

ART Side Effects

6,469 patients on ART had documented drug side effects at their last clinic visit before end September 2011. This is probably an under-ascertainment of the true rate of drug side effects, as an assumed 20-25% of patients develop at least mild side effects on regimen 1 (stavudine / lamivudine / nevirapine). Malawi continues to increase access to alternative first line regimens for such patients, and those with severe lipodystrophy are now moved to regimen 5A (tenofovir / lamivudine / efavirenz).

15 TB / HIV Management

Approximately **90%** of HIV infected TB patients were receiving ART in Q3 2011. This estimate is based on the following triangulation of TB and ART program data:

TB Program Data: A total of **5,207** TB patients were registered during Q3 2011. Assuming an average HIV prevalence of 67% among TB patients, **3,471** TB patients were estimated to be HIV positive and therefore in need of ART. Given that **1,381** TB patients registered were already on ART at the time of starting TB treatment, 3,471 – 1,381= **2,090** TB patients needed to initiate ART.

ART Program Data: An estimated **1,737** patients[4] started ART with a current or recent episode of TB during Q3 2011. This is **90%** (1,732 of 2,090) of the TB patients who needed to start ART. This means that a total of 1,381 + 1,737 = **3,118** (**90%**) of the estimated 3,471 HIV infected TB patients were receiving ART in Q3 2011.

TB / ART program triangulation *

HIV-burden among TB patients (estimated)

HIV negative (est. 33%)	1,736	33%
HIV positive (est. 66%) in need of ART	3,471	67%
Not on ART	354	10%
Total on ART (coverage)	3,118	90%
Already on ART (TB prog)	1,381	44%
Started ART within 24m of TB diagnosis (ART prog)	1,737	56%
ART initiations with current TB (ART prog)	910	52%
ART initiations after recent TB (ART prog)	827	48%

[4] 29% of the 2,447 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.

16 STI Treatment

STI program reports remained incomplete and 6 out of 29 district-level reports could not be included in this quarterly report. The STI service data presented below are estimated to represent **80%** of the total national STI program outputs.

Detailed STI Program data are presented in the **Annex.**

16.1 STI Treatment Access and Coverage

Between July and September 2011, **34,848** STI clients were served at health facilities in Malawi, representing **35%** of the 98,600 expected quarterly STI cases in the population. Out of all clients, **14,618 (42%)** were male and **20,230 (58%)** were female. **2,921 (14%)** of female STI clients were pregnant. **22,234 (64%)** of clients were 25 years and above, **9,207 (26%)** were 20-24 years and **3,408 (10%)** were under 20 years old. Considering the estimated STI case burden in the population , access to STI clinics remained particularly low among under 20 year olds: **3,408 (20%)** of the expected 17,323 STI cases in this age group were seen at the health facilities during this quarter.

16.2 Client Type and STI History

27,438 (79%) of clients were index cases and **7,490 (21%)** were partners of index cases. **4,921 (66%)** of partners were asymptomatic. Considering that a total of **13,046** partner notification slips were issued, **57%** of those notified presented to the clinic. **26,163 (75%)** of clients presented with their first lifetime episode of STI, **5,705 (16%)** clients reported to have had an STI in over three months ago and **2,970 (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 proportion of STI clients with a renewed episode (25%) was lower than in the previous quarter (31%).

16.3 HIV Status

HIV status was ascertained for **17,990 (52%)** clients and **5,716 (32%)** of these were HIV positive. **1,637 (29%)** of positives were identified through a new test initiated at the STI clinic, while **4,079 (71%)** presented with a documented previous positive HIV test result. **1,957 (48%)** of clients with a previous positive HIV test result were on ART.

The rate of HIV status ascertainment remained 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 may suggest poor translation of positive living strategies promoted during counselling, but could also be due to the increased risk of recurrence of HSV-2 and balanitis among HIV-infected clients.

16.4 STI Syndromes

The most common syndrome was abnormal vaginal discharge (AVD) with **9,990 (27%)** cases. Similar to the previous quarter, balanitis, bubo, warts and neonatal conjunctivitis each accounted for 1 – 3% of cases.

17 Supply of HIV Program Commodities

A regular 6-month supply of **968,200** Determine test kits (and proportional quantities of Uni-Gold and SD Bioline) were distributed directly to the sites in April/May 2011. Almost universal availability of HIV tests at facilities resulted in a record uptake of HTC (**509,645** were people tested during Q2 2011). This meant that the available stocks were consumed faster than ever before, leading to supply shortages and a decline in the number of people tested and counselled in the following quarter (**381,816** people were tested in Q3 2011). The HIV Program has subsequently increased the procured quantities to cater for the increased HTC uptake that had been achieved with improved supply of test kits. An expedited consignment of HIV test kits was expected to be distributed during Q4 2011.

A 4-month consignment of adult and paediatric ARVs was distributed to all 650 new and established sites between August and September 2011. New sites were given sufficient ARVs to implement PMTCT Option B+ (based on previous data from ANC and maternity) and to start providing ART for other patients. Due to the unpredictability of the number of patients transferring to new sites, a **new system for coordinated relocation of ARVs** was put in place, requiring all sites to register and obtain authorization from the HIV Department database before moving ARVs to another site.

Physical stock counts for ARVs and drugs for HIV-related diseases were performed at all sites during the supervision visits in October 2011. The HIV Program is transitioning to scheduled quarterly distributions to sites in order to reduce the storage burden at sites and to ensure that the quantification of drugs can be based on the most recent site supervision data. **Table 5** shows the total drug stocks found at the sites during the October 2011 site visits and the estimated consumption periods. Remaining stocks of two first line regimens were expected to run out completely in December 2011 (regimen 1A: stavudine / lamivudine / nevirapine) and in January 2012 (regimen 2A: zidovudine / lamivudine / nevirapine).

The actual number of patients alive on ART by the end of September **(295,962)** was lower by only 2,692 **(0.9%)** than the number projected for the quantification for procurement of ARVs **(298,654)**. This confirms that mid-term ART program have a high degree of accuracy. However, as of end of September 2011, the number of patients on regimen 5A **(4,384)** was still considerably lower than projected for this period in the procurement plan **(16,268)**. This was due to the delayed implementation of the new guidelines at many sites, which effectively created a small 'buffer' for regimen 5A at the sites. However, uptake is expected to increase over the next few quarters.

Procurement of drugs for HIV-related diseases has been delayed due to inadequacies of the in-country supply chain and many of these items were running out at the sites. Stocks of cotrimoxazole in packs of 60 tabs for CPT were low, with an estimated consumption interval of only 1 month from the stock taking in October. Cotrimoxazole in packs of 1,000 tabs is procured for treatment of HIV-related diseases rather than for CPT, but given the short supply of CPT, many sites had resumed to dispensing this instead. The number of sites with HIV and syphilis test kits and the total stocks at the sites were also critically low.

Table 5: Total stocks of HIV program commodities at all sites visited during the 2011 Q3 supportive site supervision. Stock positions are from the date of the visit (between 1-4 weeks after the end of the quarter).

Inventory unit	Item	Total physical stock	Sites with any stock	Consumption per month *	Months of stock *
tins	ABC / 3TC 60 / 30mg tins (60 tabs)	**4,648**	**28**	648	7.2
	AZT / 3TC 60 / 30mg tins (60 tabs)	**4,282**	**444**	751	5.7
	AZT / 3TC 300 / 150mg tins (60 tabs)	**40,454**	**252**	1,786	22.7
	AZT / 3TC / NVP 60 / 30 / 50mg tins (60 tabs)	**155,798**	**496**	7,505	20.8
	AZT / 3TC / NVP 300 / 150 / 200mg tins (60 tabs)	**58,343**	**297**	19,533	3.0
	d4T / 3TC 6 / 30mg tins (60 tabs)	**5,070**	**79**	463	11.0
	d4T / 3TC 30 / 150mg tins (15 tabs)	**23,944**	**537**	7,391	3.2
	d4T / 3TC 30 / 150mg tins (60 tabs)	**33,594**	**290**	5,740	5.9
	d4T / 3TC / NVP 6 / 30 / 50mg tins (60 tabs)	**20,863**	**105**	18,193	1.1
	d4T / 3TC / NVP 30 / 150 / 200mg tins (15 tabs)	**32,239**	**536**	7,391	4.4
	d4T / 3TC / NVP 30 / 150 / 200mg tins (60 tabs)	**500,115**	**574**	246,782	2.0
	EFV 200mg tins (60 tabs)	**2,697**	**28**	118	22.8
	EFV 600mg tins (30 tabs)	**54,119**	**312**	7,010	7.7
	LPV / r 100 / 25mg tins (60 tabs)	**3,428**	**22**	324	10.6
	LPV / r 200 / 50mg tins (120 tabs)	**4,497**	**62**	884	5.1
	NVP 200mg tins (60 tabs)	**10,517**	**142**	201	52.3
	TDF / 3TC 300 / 300mg tins (30 tabs)	**4,239**	**42**	739	5.7
	TDF / 3TC / EFV 300 / 300 / 600mg tins (30 tabs)	**212,536**	**519**	4,384	48.5
bottles	NVP 10mg/ml bottles (10 ml)	**3,884**	**56**		
	NVP 10mg/ml bottles (25 ml)	**55,107**	**448**	16,074	3.4
	NVP 10mg/ml bottles (100 ml)	**1,008**	**7**		
vials	Depo-Provera 150mg/1ml vials (1 each)	**328,635**	**344**		
	Bleomycine 15,000IU vials (1 each)	**831**	**24**		
	Ceftriaxone 1g vials (10 each)	**51,081**	**102**		
	Ganciclovir 250mg / ml vials (1 each)	**1,772**	**7**		
	Vincristine 1mg / 1ml vials (1 each)	**24,418**	**62**		
tabs	Aciclovir 400mg tins (500 tabs)	**5,149,712**	**400**		
	Ciprofloxacine 500mg blist packs (10 tabs)	**1,169,259**	**297**		
	Codeine 30mg tins (100 tabs)	**88,268**	**29**		
	Cotrimoxazole 100 / 20mg tins (100 tabs)	**230,059**	**36**		
	Cotrimoxazole 400 / 80mg blist packs (60 tabs)	**19,506,254**	**315**	17,796,761	1.1
	Cotrimoxazole 400 / 80mg tins (1000 tabs)	**44,615,805**	**451**		
	Fluconazole 200mg tins (100 tabs)	**418,465**	**92**		
	Ibuprofen 200mg tins (100 tabs)	**1,212,061**	**143**		
	Isoniazid 300mg tins (1000 tabs)	**53,250**	**21**		
	Morphine 10mg blist packs (60 tabs)	**214,667**	**38**		
	Pyridoxine 25mg tins (100 tabs)	**528,564**	**92**		
tests	Determine HIV1/2 boxes (100 each)	**70,883**	**263**		
	Uni-Gold HIV1/2 boxes (20 each)	**28,036**	**300**		
	SD Bioline HIV boxes (30 each)	**8,035**	**226**		
	Determine syphilis boxes (100 each)	**67,736**	**356**		
pieces	Condoms male boxes (1 each)	**17,502,292**	**467**		
	Condoms female boxes (1 each)	**970,696**	**371**		

* 'Consumption per month' and 'Months of stock' are only estimated for commodities that are directly related to patient-regimen groups in the standard service reports. Estimates are based on the number of patients on the respective regimen at the end of the quarter evaluated and do not account for potential (positive or negative) growth. 'Months of stock' is calculated from the day of the physical stock count, which is on average 1 month after the end of the quarter.

18 Trainings and Mentoring

18.1 HIV Testing and Counselling

In Q3 2011**, 14 basic HTC training** sessions for **266** participants were conducted in 11 districts, funded by CDC, NAC, MSH, Dignitas, Malawi Prisons and the Millennium Village Project. **244 (92%)** of all participants passed their exit exam and were certified as new HTC counsellors.

1 further skills training (**couples counselling**) for **25** qualified HTC counsellors was conducted in Dowa District, funded by World Vision.

18.2 PMTCT/ART

By June 2011, the Department for HIV and AIDS had developed a **5-day curriculum** for the (re)training of all health workers in the 2011 Integrated Clinical HIV Guidelines. **120 trainers were trained** by July 2011 who then went on to train health workers and clerks from all sites around the country. **2,856** health workers were trained in the new integrated PMTCT/ART curriculum between July and September, bringing the total number of health workers re-trained in the new guidelines to **3,366**. This initial wave of trainings aimed to establish at least 2 staff at each facility who were able to start implementing the new guidelines. This major national training exercise received critical budgetary, technical and logistical support from donors and implementing partners, including: USG / PEPFAR, UNICEF, MSH, CHAI, Dignitas, PIH, Lighthouse, Baylor, UNC, EGPAF, GAIA, JHPIEGO, COM. All training and participant details were captured in the new national HIV training data base (*TrainSMART*) at MOH.

A national clinical mentoring programme for HIV services has been developed with significant input from partners such as I-TECH, MSF, Dignitas International, Baylor College, Lighthouse, MSH, PIH and CHAI. Training curricula and training manuals, including M&E tools were developed and piloted in 3 partner supported districts. Training of Clinical Mentors is scheduled for the end of 2011. The clinical mentoring programme aims to provide hands on support for implementation of the new guidelines and strengthen systems particularly at the new sites.

18.3 STI

One basic STI training was conducted for **20** participants in Neno District, funded by NAC. All 20 participants passed their exit exam and were certified as new STI service providers.

19 Participants in Q3 2011 ART Supervision

Beth Barr (HIV Prevention & Care Advisor, CDC)
Dauglous Benard (MA, MOH)
Judith Binga (Nurse, MOH)
Loyd Chakwawa (CO, Malawi Defence Force)
Lincy Chalunda (CO, MOH)
Felix Chinguwo (CO, Ntcheu DH)
Bonface Chione (CO, Lighthouse)
Dorica Chirwa (Logistic officer, MOH)
Zengani Chirwa (MO/TA, MOH, Department of HIV and AIDS)
Salome Chiwewe (Nurse, MOH, Ntchisi DH)
Stephen Chu (MO/HIV Supervisor, South East Zone)
Stuart Chuka (CO, MBCA)
Peter Donda (CO, Dedza DH)
Dominic Gondwe (Nurse, Dedza DH)
Suleiman Ibrahim (MO/HIV Supervisor, Central West Zone)
Andreas Jahn (MO/TA, Department for HIV and AIDS)
Vera Kajawo (Nurse, MOH)
Agnes Kalitsiro (Nurse, CHAM, Mlambe Mission Hospital)
Joseph Kasola (CO, MOH, Chitipa DH)
Catherine Kassam (Nurse, MOH)
McDonald Katsateni (Clerk, MOH)
Rodrick Kaulele (CO, CHAM)
Absalom Kaunda (CO, MOH, Mzimba DH)
Prospere Lutala (MO/HIV Supervisor, Central East Zone)
Mercy Magombo (Nurse, MOH)
Martha Majiya (Nurse, MOH)
Lonjezo Makombe (HSA, MOH)
Simon Makombe (ART Officer, Department for HIV and AIDS)
Amos Makwaya (CO, MOH)
Kondwani Makwenda (CO, MSH)
Mercy Mangambo (Supervisor, MOH)
Hannock Matupi (CO, MOH, Rumphi DH)
Benjamin Mazalo (CO, SUCOMA Clinic)
Loyd Mbaza (Nurse, MOH)

Loyna Mbewe (Nurse, MOH)
Chrissy Mbewe (Nurse, MOH)
C Mhango (Nurse, Private)
Eustice Mhango (ART Officer, Department for HIV and AIDS)
Dalitso Midiani (PMTCT Officer, Department for HIV and AIDS)
Everista Mkandawire (Nurse, MOH)
Christopher Mkwezalamba (CO, MOH)
Andraida Mtoseni (Nurse, MOH)
Nicodeme Mubiala (MO/HIV Supervisor, Northern Zone)
Fainala Muyila (Nurse, MOH)
Ruockia Mwachumu (Nurse, MOH, Nsanje DH)
James Mwambene (CO, Diginitas International)
Austin Mwenechanya (Nurse, MOH)
Musaku Mwenechanya (CO, MOH)
Mapay Ngalala (MO/HIV Supervisor, South West Zone)
Stanley Ngoma (CO, MOH)
Joseph Njala (Clin. HIV Fellow, Department for HIV and AIDS)
Angela Nkhoma (Nurse, MOH)
Angella Nkhomo (Supervisor, MOH)
Joseph Ntale (MOH)
Mourine Gumbo Ntambo (Nurse, MOH)
Sabina Phiri (Nurse, MOH)
Richard Abuduo Onani (CO, MOH)
Monica Simfukwe (Nurse, MOH, Chintheche RH)
Elizabeth Tamula (Nurse, Baylor)
Evalista Tchuba (Nurse, MOH)
Dyson Telela (Nurse, MOH, Nkhata Bay DH)
Cecelia Tenesi (Nurse, MOH)
Lyson Tenthani (M&E Fellow, Department for HIV and AIDS)
Keneth Zakeyu (MA, MOH)
Gerald Zomba (Clin. HIV Fellow, Department for HIV and AIDS)

Report compiled by:

Frank Chimbwandira (MO/Head of Dept. for HIV and AIDS)
Austin Mnthambala (MO/Deputy of Dept. for HIV and AIDS
Simon Makombe (ART Officer, Dept. for HIV and AIDS)
Eustice Mhango (ART Officer, Dept. for HIV and AIDS)
Michael Eliya (PMTCT Officer, Dept. for HIV and AIDS)
Dalitso Midiani (PMTCT Officer, Dept. for HIV and AIDS)
Mtemwa Nyangulu (HTC Officer, Dept. for HIV and AIDS)
Lucius Ng'omang'oma (HTC Officer, Dept. for HIV and AIDS)
Amon Nkhata (STI Officer, Dept. for HIV and AIDS)
Andreas Jahn (MO/TA, Dept. for HIV and AIDS)
Zengani Chirwa (MO/TA, MOH, Dept. of HIV and AIDS)
Lyson Tenthani (M&E Fellow, Dept. for HIV and AIDS)
Gerald Zomba (Clin. HIV Fellow, Dept. for HIV and AIDS)
Jonas Nyasulu (IT Fellow, Dept. for HIV and AIDS)
Joseph Njala (Clin. HIV Fellow, Dept. for HIV and AIDS)

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.

9th April 2012

20 Appendix (Full National HIV Program Data)

2011 Q3 HTC Report

			National coverage	
			Population denominator	
Total Number of Clients	**381,816**		3,772,503	**10%**
Gender and Pregnancy				
Males	127,451	33%	1,891,196	**7%**
Females	254,365	67%	1,881,306	**14%**
Females Non Pregnant	133,479	52%	1,274,306	**10%**
Females Pregnant	120,886	48%	151,750	**80%**
Age				
25 years and above	207,475	54%	1,256,106	**17%**
15 - 24 years	145,678	38%	789,500	**18%**
Children Below 15	28,575	7%	872,055	**3%**
18months - 14 years	23,919	84%	41,215	**58%**
Below 18months	4,656	16%	830,840	**1%**
HIV Test History				
Previously tested	**216,236**	57%		
Never tested before	165,580	43%		
Number of people ever tested since 2007	3,467,398			
Counselling Type				
Counseled with partner	**69,541**	18%		
Counseled alone	312,275	82%		
HIV Test Resuts				
Single test negative	341,960	90%		
First and second test negative	352	0%		
First and second test positive	38,189	10%		
First and second test discordant	1,354	0%		
Final Result				
No of children <18months with antibody positive	727	0%		
Positive	41,195	11%		
Negative	339,836	89%		
Inconclusive	183	0%		
Referrals (multiple possible)				
ARVs	29,915			
TB	1,895			
PMTCT	7,318			
Other	9,952			

HIV Care Clinic (HCC) cohort analysis

Malawi (national)

2011 Q3 (Quarter)

Registration details

*

HCC clinic registrations

Total HCC registrations	12,189	100%

Registration type

Patients enrolled first time	12,056	99%
Patients re-enrolled	47	0%
Patients transferred in	86	1%

Sex

Males (all ages)	4,181	34%
Females (all ages)	8,009	66%
Non-pregnant	7,690	96%
Pregnant	319	4%

Age at registration

Adults 15+ yrs	7,848	64%
Children 0-14 yrs	4,341	36%
Children 24 months - 14 years	715	16%
Children below 24 months (exposed children)	3,626	84%
Children 2 - below 24 months	2,704	75%
Infants below 2 months	922	25%

Reason for HCC registration

Exposed infants	3,596	29%
Confirmed infected patients (pre-ART)	8,594	71%

* Subgroups may not add to 100% due to rounding

HIV Care Clinic (HCC) cohort analysis

Malawi (national)

2011 Q3 (Cumulative)

Registration details *

HCC clinic registrations

Total HCC registrations	12,228	100%

Registration type

Patients enrolled first time	12,081	99%
Patients re-enrolled	61	0%
Patients transferred in	86	1%

Sex

Males (all ages)	4,214	34%
Females (all ages)	8,014	66%
Non-pregnant	7,710	96%
Pregnant	304	4%

Age at registration

Adults 15+ yrs	7,825	64%
Children 0-14 yrs	4,403	36%
Children 24 months - 14 years	712	16%
Children below 24 months (exposed children)	3,691	84%
Children 2 - below 24 months	2,750	75%
Infants below 2 months	941	25%

Reason for HCC registration

Exposed infants	3,677	30%
Confirmed infected patients (pre-ART)	8,551	70%

Pre-ART follow-up outcome *

Primary follow-up outcomes

Total retained in pre-ART	8,129	95%
Started ART	394	5%
Defaulted	1	0%
Died	10	0%

Transfers between sites

Total not transferred out	8,470	99%
Transferred out	81	1%

* Subgroups may not add to 100% due to rounding

HIV exposed child follow-up

Malawi (national)

2011 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Age 2 months

Age cohort outcomes

*

Total children in birth cohort

Total children registered	841	100%

CPT status

On CPT	784	94%
Not on CPT	51	6%

HIV status

Current HIV infection status unknown	451	54%
HIV infection not confirmed, not ART eligible	444	98%
HIV infection not confirmed, ART eligible (PSHD)	7	2%
Current HIV infection status known	390	46%
Confirmed not infected	371	95%
Confirmed infected (ART eligible)	19	5%

ART eligibility summary

Not eligible for ART	815	97%
ART eligible	26	3%
ART not initiated	8	31%
Initiated ART	18	69%

Primary follow-up outcome

Discharged uninfected	12	1%
Continue follow-up	818	96%
Started ART	18	2%
Defaulted	0	0%
Died	0	0%

Transfers between sites

Total not transferred out	839	100%
Transferred out	2	0%

Age 12 months

Age cohort outcomes

*

Total children in birth cohort

Total children registered	539	100%

CPT status

On CPT	490	91%
Not on CPT	47	9%

HIV status

Current HIV infection status unknown	159	30%
HIV infection not confirmed, not ART eligible	158	99%
HIV infection not confirmed, ART eligible (PSHD)	1	1%
Current HIV infection status known	375	70%
Confirmed not infected	335	89%
Confirmed infected (ART eligible)	40	11%

* Subgroups may not add to 100% due to rounding

Age cohort outcomes *

ART eligibility summary

Not eligible for ART	498	92%
ART eligible	41	8%
ART not initiated	2	5%
Initiated ART	39	95%

Primary follow-up outcome

Discharged uninfected	25	5%
Continue follow-up	462	86%
Started ART	39	7%
Defaulted	6	1%
Died	5	1%

Transfers between sites

Total not transferred out	537	100%
Transferred out	2	0%

Age 24 months

Age cohort outcomes *

Total children in birth cohort

Total children registered	304	100%

CPT status

On CPT	190	63%
Not on CPT	114	38%

HIV status

Current HIV infection status unknown	34	11%
HIV infection not confirmed, not ART eligible	33	97%
HIV infection not confirmed, ART eligible (PSHD)	1	3%
Current HIV infection status known	280	89%
Confirmed not infected	247	88%
Confirmed infected (ART eligible)	33	12%

ART eligibility summary

Not eligible for ART	270	89%
ART eligible	34	11%
ART not initiated	4	12%
Initiated ART	30	88%

Primary follow-up outcome

Discharged uninfected	108	35%
Continue follow-up	148	47%
Started ART	30	10%
Defaulted	18	6%
Died	9	3%

Transfers between sites

Total not transferred out	303	100%
Transferred out	1	0%

Antenatal Care

Malawi (national)

2011 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

New ANC registrations in reporting period *

Women with first visit in reporting period

New women registered	160,917	100%

ANC cohort analysis *

Total women completing ANC in the reporting period

Total women in booking cohort	162,187	100%

Visits per woman

Women with 1 visit	35,745	22%
Women with 2 visits	42,975	26%
Women with 3 visits	47,494	29%
Women with 4 visits	29,016	18%
Women with 5+ visits	6,957	4%

Trimester of first visit

Started ANC 0-12 wks	16,521	10%
Started ANC 13+ wks	145,279	90%

Pre-eclampsia

No pre-eclampsia	154,890	96%
Pre-eclampsia	7,025	4%

TTV doses

0-1 TTV doses	69,302	43%
2+ TTV doses	92,466	57%

SP tablets

0-5 SP tablets	71,407	44%
6+ SP tablets	90,419	56%

FeFo tablets

0-119 FeFo tablets	127,900	79%
120+ FeFo tablets	33,895	21%

Syphilis status

Not tested for syphilis	115,515	71%
Tested for syphilis	46,415	29%
Syphilis negative	44,998	97%
Syphilis positive	1,417	3%

HIV status ascertainment

HIV status not ascertained	42,044	26%
HIV status ascertained	120,201	74%
Valid previous test result	7,935	7%
Previous negative	4,826	61%
Previous positive	3,109	39%
New test at ANC	112,266	93%
New negative	105,039	94%
New positive	7,227	6%

HIV status summary

Total women HIV negative	109,865	91%
Total women HIV positive	10,336	9%

* Subgroups may not add to 100% due to rounding

Antenatal Care

Malawi (national)

2011 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

ANC cohort analysis

*

ART eligibility

Unknown		3,425	33%
ART eligibility determined		6,905	67%
	Not eligible	4,278	62%
	Eligible	2,627	38%

CPT status

Not on CPT		1,522	15%
On CPT		8,966	85%

Final PMTCT regimen mother

None		2,286	22%
Any ARVs		8,277	78%
	sdNVP	1,525	18%
	AZT	4,324	52%
	ART	2,428	29%

Baby's ARVs dispensed

No		9,143	90%
Yes		1,048	10%

* Subgroups may not add to 100% due to rounding

Maternity

Malawi (national)

2011 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternal details

*

Admissions in the reporting period

Total admissions (referrals double-counted)	126,514	100%
Not referred to other site (total women)	119,983	95%
Referred out before delivery (multiple admissions)	6,531	5%

HIV status ascertainment

HIV status not ascertained	11,768	9%
HIV status ascertained	115,103	91%
Valid previous test result	110,660	96%
Previous negative	101,877	92%
Previous positive	8,783	8%
New test at maternity	4,443	4%
New negative	4,034	91%
New positive	409	9%

HIV status summary

Total women HIV negative	105,911	92%
Total women HIV positive	9,192	8%

ARVs during pregnancy (among HIV pos)

None	1,831	20%
Any ARVs	7,361	80%
AZT combination prophylaxis	4,168	57%
AZT 0-3 weeks	1,254	30%
AZT 4+ weeks	2,914	70%
ART	3,193	43%
ART 0-3 weeks	415	13%
ART 4+ weeks	2,778	87%

ARVs during labour (among HIV pos)

None	1,065	12%
Any ARVs	8,127	88%
sd NVP	1,219	15%
NVP + AZT + 3TC	3,989	49%
ART	2,919	36%

Obstetric complications

None	114,007	90%
Any complications	12,672	10%
Haemorrhage	1,984	16%
Obstr / prol labour	4,340	34%
(pre-) Eclampsia	906	7%
Ruptured uterus	144	1%
Maternal sepsis	143	1%
Other	5,155	41%

Referred out before delivery

No	119,983	95%
Yes	6,531	5%

* Subgroups may not add to 100% due to rounding

Maternity

Malawi (national)

2011 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternal details

*

Staff conducting delivery

Category A: MO, CO, nurse/midwife, MA	113,715	94%
Category B: PA, WA, HSA	1,546	1%
Category C: Other	5,160	4%

Mother survival

Alive	120,150	100%
Died	169	0%

Infant details

*

Single babies / multiple deliveries

Total babies delivered	123,243	100%
Single babies	117,466	95%
Twin / multiple babies	5,777	5%

Delivery place

Total deliveries at a health facility	117,644	95%
This facility	117,167	100%
Other facility	477	0%
Total deliveries before reaching the facility	5,561	5%
In transit	3,156	57%
Home / TBA	2,405	43%

Delivery mode

Spontaneous vaginal	111,440	91%
Vacuum extraction	1,737	1%
Breech	2,724	2%
Caesarean section	7,171	6%

Infant complications

None	110,258	90%
Total infants with complications	12,883	10%
Prematurity	3,542	27%
Weight less 2500g	3,914	30%
Asphyxia	2,758	21%
Sepsis	799	6%
Other	1,870	15%

Infant survival

Total live births	120,833	98%
Discharged alive	119,707	99%
Neonatal deaths	1,126	1%
Stillbirths	2,322	2%
Stillbirth, fresh	1,294	56%
Stillbirth, macerated	1,028	44%

* Subgroups may not add to 100% due to rounding

Maternity

Malawi (national)

2011 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Infant details

*

HIV exposure / ARV proph. (among discharged alive)

Infants with unknown HIV exposure status	9,527	8%
Infants with known HIV exposure status	110,180	92%
Not HIV exposed	101,671	92%
HIV exposed	8,509	8%
Received no ARVs	751	9%
Received ARVs	7,758	91%
Nevirapine	2,020	26%
AZT combination regimen	5,738	74%
Started zidovudine only	2,094	36%
Started zidovudine + nevirapine	3,644	64%

Breastfeeding initiated

No	6,261	5%
Yes	116,312	95%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2011 Q3 (Quarter)

Registration details

*

ART clinic registrations

Total ART clinic registrations	34,717	100%

Registration type

First time ART initiations (total patients)	24,638	71%
ART re-initiations	113	0%
ART transfers in	9,966	29%

Sex

Males	12,190	35%
Females	22,527	65%
Non-pregnant	18,966	84%
Pregnant	3,561	16%

Age at ART initiation

Adults 15+ yrs	31,731	91%
Children 0-14 yrs	2,986	9%
Children 2-14 yrs	2,311	77%
Children below 24 mths	675	23%

Reason for starting ART

Presumed severe HIV Disease	152	0%
Confirmed HIV infection	34,565	100%
WHO stage 1 or 2	14,893	43%
Total lymphocytes <threshold	23	0%
CD4 below threshold	11,283	76%
CD4 unknown or >threshold	3,587	24%
PCR infants	215	6%
Children 12-23 mths	131	4%
Pregnant women	1,847	51%
Breastfeeding mothers	1,394	39%
WHO stage 3	16,189	47%
WHO stage 4	2,872	8%
Unknown / reason outside of guidelines	611	2%

TB at ART initiation

Never TB / TB > 24 months ago	32,270	93%
TB within the last 24 months	1,165	3%
Current episode of TB	1,282	4%

Kaposi's sarcoma at ART initiation

No KS	34,177	98%
Patients with KS	540	2%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2011 Q3 (Cumulative)

Registration details

*

ART clinic registrations

Total ART clinic registrations	488,845	100%

Registration type

First time ART initiations (total patients)	409,097	84%
ART re-initiations	525	0%
ART transfers in	79,222	16%

Sex

Males	190,339	39%
Females	298,506	61%
Non-pregnant	279,985	94%
Pregnant	18,521	6%

Age at ART initiation

Adults 15+ yrs	444,390	91%
Children 0-14 yrs	44,455	9%
Children 2-14 yrs	36,502	82%
Children below 24 mths	7,953	18%

Reason for starting ART

Presumed severe HIV Disease	1,683	0%
Confirmed HIV infection	487,162	100%
WHO stage 1 or 2	132,587	27%
Total lymphocytes <threshold	161	0%
CD4 below threshold	124,295	94%
CD4 unknown or >threshold	8,131	6%
PCR infants	1,802	22%
Children 12-23 mths	1,700	21%
Pregnant women	3,228	40%
Breastfeeding mothers	1,401	17%
WHO stage 3	277,665	57%
WHO stage 4	67,782	14%
Unknown / reason outside of guidelines	9,128	2%

TB at ART initiation

Never TB / TB > 24 months ago	435,909	89%
TB within the last 24 months	37,292	8%
Current episode of TB	15,644	3%

Kaposi's sarcoma at ART initiation

No KS	474,946	97%
Patients with KS	13,899	3%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2011 Q3 (Cumulative)

ART outcomes

*

Primary follow-up outcomes

Total alive on ART		296,246	72%
	Alive on ART at site of last registration	294,987	100%
	ART patients in transit between sites	1,259	0%
Defaulted		64,657	16%
Stopped ART		1,990	0%
Total died		46,563	11%
	Died month 1	12,972	28%
	Died month 2	8,636	19%
	Died month 3	4,788	10%
	Died month 4+	20,167	43%

Transfers between sites

Total not transferred out		408,364	84%
Transferred out		80,481	16%

ART regimens

First line regimens		288,854	98%
	Adult formulation	278,360	96%
		Regimen 1A	247,232	89%
		Regimen 2A	19,533	7%
		Regimen 3A	5,740	2%
		Regimen 4A	1,270	0%
		Regimen 5A	4,384	2%
		Regimen 6A	201	0%
	Paed. formulation	10,494	4%
		Regimen 1P	7,277	69%
		Regimen 2P	3,002	29%
		Regimen 3P	185	2%
		Regimen 4P	30	0%
Second line regimens		1,100	0%
	Adult formulation	884	80%
		Regimen 7A	538	61%
		Regimen 8A	346	39%
	Paed. Formulation	216	20%
		Regimen 9P	216	100%
Other regimen (adult / paed)		5,033	2%

Adherence

Adherence not recorded		46,438	16%
Adherence recorded		248,549	84%
	0-6 doses missed	223,575	90%
	7+ doses missed	24,974	10%

ART side effects

Side effects not recorded		263,294	89%
Side effects recorded		31,693	11%
	No side effects	25,224	80%
	Any side effects	6,469	20%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2011 Q3 (Cumulative)

ART outcomes

*

ICF (current TB status among ART patients)

Intensified case finding not done		31,680	11%
Intensified case finding done		263,307	89%
	TB not suspected	260,920	99%
	TB suspected	366	0%
	TB confirmed	2,021	1%
		TB confirmed, not on treatment	421	21%
		TB confirmed, on TB treatment	1,600	79%

* Subgroups may not add to 100% due to rounding

2011 Q3 STI Report

			National coverage Population denominator	
Total Number of Clients	34,848		98,604	35%
Gender and Pregnancy				
Males	14,618	42%	37,993	38%
Females	20,230	58%	60,612	33%
Females Non Pregnant	17,309	86%		
Females Pregnant	2,921	14%		
Age				
Age A (<20 years)	3,408	10%	17,323	20%
Age B (20 - 24 years)	9,207	26%	24,952	37%
Age C (25 years and above)	22,234	64%	56,799	39%
Type				
Index cases	27,438	79%		
Partners	7,490	21%		
Asymptomatic	4,921	66%		
Symptomatic	2,569	34%		
Partner Notification				
Partner Slips issued	13,046			
Partners	8,438	65%		
STI History				
Never	26,163	75%		
Old (previous STI >3months ago)	5,705	16%		
Recent (previuos STI <3months ago)	2,970	9%		
HIV Status				
HIV status unknown	16,859	48%		
HIV Status ascertained	17,990	52%		
Total HIV negative (new test)	12,274	68%		
Total HIV positive	5,716	32%		
Total new HIV positive	1,637	29%		
Total previous HIV positive	4,079	71%		
Not on ART	2,122	52%		
On ART	1,957	48%		
Syndromes				
Total Syndromes*	37,553			
Abnormal Varginal Discharge Total	9,990	27%		
Low Risk	4,128	41%		
High Risk	5,862	59%		
Genital Ulcer Disease	6,987	19%		
Urethral Discharge	8,152	22%		
Lower abdominal Pain	6,348	17%		
Scrotal Swelling	581	2%		
Bubo	747	2%		
Balanitis	710	2%		
Neonatal Conjunctivitis	312	1%		
Warts	426	1%		
Syphillis	1,135	3%		
Other	2,165	6%		
Referrals (multiple possible)				
Repeat HTC[&]	8,053	28%		
ART	884			
Lab	558			
PMTCT	151			
Gynae	270			
Surgical	78			
Other	856			

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

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