Government of Malawi Ministry of Health

Integrated HIV Program Report
January – March 2012

- *HIV Testing and Counselling*
- *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 third quarterly HIV Program report after implementation of the 2011 Integrated Clinical HIV Guidelines[1] in July 2011. A summary of the key achievements between **January and March 2012** is provided below:

- Scale-up of integrated HIV services had reached the following number of sites:
  - **810** HTC sites (565 within and 245 outside of health facilities)
  - **595** (static) ART sites
  - **528** PMTCT sites (Option B+)
  - **504** Pre-ART sites
  - **493** sites with HIV-exposed child follow-up
- **440,763** persons were tested and counselled for HIV and **47,629 (11%)** were HIV positive; **186,487 (42%)** people tested for the first time.
- **128,959 (76%)** of 169,251 women at ANC had their HIV status ascertained; **10,959 (8%)** of these were HIV positive and **8,344 (76%)** of these were known to have received ARVs.
- **94,847 (85%)** of 111,536 women at maternity had their HIV status ascertained; **9,109 (10%)** of these were HIV positive and **7,203 (79%)** of these received ARVs during labour.
- **7,977 (9%)** of infants discharged alive from maternity were known to be HIV exposed, **7,177 (90%)** of these received ARV prophylaxis. **3,482 (44%)** were enrolled in exposed child follow-up before age 2 months.
- **11,701** women started ART under *Option B+*: **7,223** (62%) were pregnant and **4,478** (38%) were breastfeeding.
- **33,336** patients started ART during this quarter; this is a slight decrease from the previous quarter, showing that the most of the 'backlog' of patients who became eligible due to the change of the guidelines have now started ART. The program is moving again towards a more steady state for new ART initiations.
- **80%** of adults and **74%** of children were retained alive on ART 12 months after ART initiation.
- **347,983** patients were alive and on ART by end of March 2012; **39,700 (11%)** were on ART regimen 5A (tenofovir / lamivudine / efavirenz)
- **9,382** HIV exposed children and **15,085** pre-ART patients enrolled for follow-up in *HIV Care Clinics (HCC)*
- **184** health workers were trained in the new integrated PMTCT/ART curriculum during Q1 2012, bringing the total number of health workers re-trained in the new guidelines to **4,389**. **82** tutors from training institutions were trained in the new PMTCT/ART curriculum in order to integrate this content in the pre-service training for new health workers. All training details were captured in the new national HIV training data base (*TrainSMART*) at MOH.
- **240** new HTC providers were trained during Q1 (92 health workers in PITC and 148 lay counsellors in basic HTC). A total of **232** passed their exit exam and qualified as new HTC providers.

[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 exercises.

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

649 public and private sector facilities were visited for **clinical HIV program supervision** during the last 3 weeks of April 2012. The large number of sites included in this supervision round was covered by **61** supervisors working in **20** teams. The teams spent a total of **1,538 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. **222** clinic teams were awarded a *Certificate of Excellence* for **excellent performance** during the Q4 supervision visit. **195** 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 expanded over the next months.

Table 1: Outcomes of integrated HIV services supervision for 2012 Q1

Zone	Total facil. visited*	Supervision hours spent at facilities		Performance (# and % of sites)	
		Total	Average per site	Excellent perform.	Mentoring needed
NZ	117	249	2.1	28 24%	87 74%
CEZ	94	194	2.2	29 31%	35 37%
CWZ	146	349	2.4	45 31%	39 27%
SEZ	146	384	2.7	53 36%	21 14%
SWZ	146	362	2.5	67 46%	13 9%
Malawi	649	1,538	2.4	222 34%	195 30%

* 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 **78** sites in the North and South East Zones were visited for supportive **HTC site supervision** for Q1 2012. Almost all visited sites had adequate numbers of HTC providers, but many (mainly in the South East Zone) had run out of reagents. HTC Guidelines were available in the HTC rooms. Quality control testing was not done in many sites in the South East Zone due to inadequate or late supply with quality control samples. Only about 2/3 of HTC providers had participated in proficiency testing (PT) during this quarter and some counsellors had not received feedback from the previous PT exercise. There were similar challenges in all visited sites, related to the need for more consistent supervision at the district level. Most district HTC supervisors had failed to visit any sites due to fuel shortages and district budget constraints. Many HTC providers needed refresher trainings and sites needed updated IEC materials and stop watches.

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 2012 Q1

Zone	Total fac.(1)	Facilities providing HIV services				CD4 count machines (2)		
		Exp. child	Pre-ART	PMTCT B+	ART	Installed	Functional	Results
NZ	119	86 72%	88 74%	90 76%	103 87%	14 12%	11 79%	2,506
CEZ	93	65 70%	60 65%	70 75%	75 81%	10 11%	6 60%	2,862
CWZ	152	109 72%	115 76%	120 79%	138 91%	20 13%	17 85%	5,075
SWZ	147	109 74%	119 81%	117 80%	140 95%	16 11%	11 69%	10,697
SEZ	152	124 82%	122 80%	131 86%	139 91%	11 7%	9 82%	7,188
Malawi	663	493 74%	504 76%	528 80%	595 90%	71 11%	54 76%	28,328

(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 Q1 2012 and **245** 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 **663** sites designated to provide clinical HIV services in Q1 2012, by zone. At the national level, there were **595** (static) sites with at least one patient on ART, **528** sites had enrolled women under PMTCT Option B+; **504** sites were providing pre-ART services and **493** had enrolled HIV exposed children for follow-up. The South West Zone had maintained the highest ART site coverage (95% of designated sites) and the highest proportion of sites that had started providing PMTCT Option B+ (81%).

CD4 count machines were installed at **71** sites, but only **54 (76%)** of these had produced at least 1 result during Q1. The total number of CD4 results produced during Q4 was **28,328** and more than half of this output was from the South West Zone, implying that many CD4 machines were down or running considerably below capacity.

5 HIV Testing and Counselling Program Outputs

440,763 people were tested and counselled for HIV between January and March 2012. Testing has picked up considerably due to re-supply with test kits in January 2012 (see page 21 for further supply chain details). **47,629 (11%)** of all people tested were HIV positive.

Out of **440,763** people tested and counselled, **33%** were males and **67%** were females. Among females, **47%** were pregnant and **53%** were not pregnant.

53% of all people tested and counselled were 25 years and above, **39%** were between 15-24 years and **8%** were children below 15years.

65,859 (15%) accessed HTC with their partners (as a couple).

186,487 (42%) of 440,763 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 **3,783,813** 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 **592** persons received PEP during Q1 2012. This is a slight decrease from the previous quarter (642). There has been an overall increase in the uptake of PEP since the implementation of the 2011 Integrated Clinical HIV Curriculum which includes a streamlined PEP protocol.

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 2012 Q1.

	Pre-ART			ART			Both patient groups		
Zone	Tot. women	On Depo		Tot. women	On Depo		Tot. women	On Depo	
NZ	1,221	**0**	*0%*	20,007	**0**	*0%*	21,228	**0**	*0%*
CEZ	808	**50**	*6%*	16,348	**446**	*3%*	17,156	**496**	*3%*
CWZ	1,802	**306**	*17%*	40,539	**5,592**	*14%*	42,340	**5,898**	*14%*
SEZ	3,670	**311**	*8%*	54,308	**5,933**	*11%*	57,978	**6,245**	*11%*
SWZ	6,258	**770**	*12%*	69,629	**11,106**	*16%*	75,887	**11,877**	*16%*
Malawi	13,758	**1,438**	*10%*	200,831	**23,077**	*11%*	214,589	**24,516**	*11%*

* 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 **24,516 (11%)** women received Depo-Provera from HIV clinics in Q1 2012. This is an apparent decrease from the previous quarter (39,696), which is most likely due to reporting errors, rather than due an actual change of this magnitude. An increase in PIFP output 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 **308,006 (76%)** of all HIV patients in Q1 2012 were on CPT. Coverage had decreased considerably in all 3 eligible patient groups compared with the previous quarter and it was lowest in the South West Zone (53%). This decline was caused by increasing stock outs of cotrimoxazole for CPT (see page 21 for further supply chain details).

Table 4: Number and % of patients retained in HIV care who were on cotrimoxazole and isoniazid preventive therapy (CPT, IPT) by the end of 2012 Q1.

	CPT								IPT	
	Exp. child		Pre-ART		ART		All patient groups		Pre-ART	
Zone	Tot. pat.	On CPT	Tot. pat.	On CPT	Tot. pat.	On CPT	Tot. pat.	On CPT	Tot. pat.	On IPT
NZ	1,963	**1,235** *63%*	3,073	**2,467** *80%*	36,328	**29,469** *81%*	41,364	**33,171** *80%*	3,073	**0** *0%*
CEZ	1,878	**1,206** *64%*	2,263	**2,182** *96%*	29,256	**25,124** *86%*	33,397	**28,512** *85%*	2,263	**3** *0%*
CWZ	4,355	**3,294** *76%*	5,197	**4,911** *94%*	72,277	**66,818** *92%*	81,829	**75,023** *92%*	5,197	**8** *0%*
SEZ	7,220	**5,735** *79%*	8,966	**8,369** *93%*	88,364	**81,063** *92%*	104,550	**95,167** *91%*	8,966	**75** *1%*
SWZ	7,476	**5,342** *71%*	14,667	**6,825** *47%*	120,961	**63,966** *53%*	143,104	**76,133** *53%*	14,667	**28** *0%*
Malawi	22,892	**16,812** *73%*	34,166	**24,753** *72%*	347,186	**266,441** *77%*	404,244	**308,006** *76%*	34,166	**114** *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.

308,475 (89%) of all patients retained on ART were screened for TB at their last visit before end of March 2011. As of that visit, **1,800 (1%)** patients were new TB suspects and had presumably been referred for examination by a clinician and for TB investigations. **5,070 (2%)** had confirmed TB (clinical or lab based). Out of these, **1,568 (31%)** were confirmed to be on TB treatment and **3,502 (69%)** had not yet started or had interrupted TB treatment. An excerpt from the data in the **Annex** (*Cumulative ART outcomes*) is shown below. There has been a considerable increase in the number of new TB suspects and confirmed TB cases among ART patients, probably due to a more thorough implementation of ICF in ART clinics.

ICF (current TB status among ART patients)

Intensified case finding not done		**38,711**	**11%**
Intensified case finding done		**308,475**	**89%**
	TB not suspected	**301,605**	98%
	TB suspected	**1,800**	1%
	TB confirmed	**5,070**	2%
		TB confirmed, not on treatment	**3,502**	69%
		TB confirmed, on TB treatment	**1,568**	31%

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 proper implementation of IPT is expected to start in Q3 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 decreased from 5,332 in Q4 2011 to **4,961** in Q1 2012. The HIV ascertainment rate remained at **90%; 63%** of TB patients whose HIV status was ascertained were positive and **54%** of these were already on ART when starting TB treatment. The continuous 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 TB case detection rates among ART patients. New oesophageal candidiasis (OC) cases decreased to **231** in Q1 and cryptococcal meningitis (CM) cases decreased to **149**. Reporting on OC and CM is linked to the availability of fluconazole at the health facilities and the decrease in reported cases does probably not suggest a decline in the burden of these OIs.

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
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
2011 Q4	5,332	4,788 *90%*	2,957 *62%*	1,526 *52%*	604	219	716
2012 Q1	4,961	4,486 *90%*	2,815 *63%*	1,531 *54%*	571	149	231

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 third quarterly report from the new standard follow-up program for HIV exposed children and the data should still be regarded as preliminary: **9,382** HIV exposed children were registered during Q1 2012, which is similar to the previous quarter. **3,482 (37%)** of these were enrolled under the age of 2 months.

11.3 Birth Cohort Outcomes

There were **5,162** infants in the **2 month age cohort**. **229 (4%)** had received a DNA-PCR result and **25 (11%)** of these were confirmed HIV infected. An additional **11** infants were diagnosed with *presumed severe HIV disease,* which means that a total of **36** infants were eligible for ART. **12 (33%)** of these had started ART. Out of the entire 2-month age cohort, **4,640 (90%)** were retained in exposed child follow-up, **12 (<1%)** had started ART and **8 (<1%)** were discharged confirmed uninfected[2]. **13 (<1%)** were known to have died and **463 (9%)** had been lost to follow-up.

There were **2,196** children in the **12 month age cohort**. Current HIV infection status was known for **248 (11%)** children (DNA-PCR or rapid antibody test) and **38 (15%)** of these were confirmed HIV infected. **26 (1%)** additional children had been diagnosed with *presumed severe HIV disease,* which means that a total of **64** children were eligible for ART. **48 (75%)** of these had started ART. Out of the entire age cohort, **1,870 (85%)** were retained in exposed child follow-up, **48 (2%)** had started ART and **68 (3%)** were discharged confirmed uninfected2. **187 (9%)** were lost to follow-up and **16 (1%)** were known to have died.

There were **586** children in the **24 month age cohort**. Current HIV infection status was known for **398 (68%)** children (DNA-PCR or rapid antibody test) and **33 (8%)** of these were confirmed HIV infected. **9** additional children had been diagnosed with *presumed severe HIV disease,* which means that a total of **42** children were eligible for ART. **27 (64%)** of these had started ART. Out of the entire age cohort, **90 (16%)** were retained in exposed child follow-up, **27 (5%)** had started ART and **347 (63%)** were discharged confirmed uninfected[2]. **67 (12%)** were lost to follow-up and **21 (4%)** were known to have died.

HIV-free survival in this quarter was **63%**, which was similar to the previous quarter. 188 (32%) children in this cohort were classified as '*current HIV infection status unknown'* and the majority of these were probably among the 67 children lost to follow-up and the 21 children who had died. However, 90 (16%) were retained in follow-up beyond age 24 months, probably due to continued breast feeding and the final rapid test was not available for these children. The exposed child cohort reports are expected to further consolidate over the next quarters.

[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.

12 Pre-ART

This is the third quarterly report from the new standard pre-ART follow-up program and the data are expected to further consolidate over the next quarters.

12.1 Pre-ART Registration Data

A total of **15,085** patients were newly registered for pre-ART follow-up in Q1 2012, which is a further slight increase from the previous quarter. **1,523 (14%)** of these were children aged 2-14 years. Several sites had already established pre-ART services before July 2011 and the cumulative number of pre-ART patients ever registered was **80,114**.

12.2 Cumulative Pre-ART Follow-up Outcomes

34,166 (43%) of all patients ever registered were retained in pre-ART follow-up by the end of Q1 2012; **32,830 (41%)** had started ART; **11,083 (14%)** had been lost to follow-up; **1,257 (2%)** were known to have died. The proportion of patients who started ART will continue to increase in the cumulative pre-ART cohort analysis over time.

24,753 (72%) of patients retained in pre-ART were on CPT. **1,438 (10%)** of 13,758 women had received Depo-Provera from their pre-ART clinic. Proper 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 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. About 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 have been distributed in Q2 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**.

155,802 women attended ANC for their first visit between January and March 2012. This exceeds the 97% of the estimated 151,750 pregnant women in the Malawian population during one quarter, which is likely explained by a considerable number of women from neighbouring countries who are accessing health services in Malawi. ANC cohort outcome reports (see below) were complete for almost all sites.

The following report covers the outcomes of the **169,251** women who started ANC between July and September 2011 and who had finished ANC by March 2012. **14,197 (8%)** of women started ANC in their first trimester. **56,943 (34%)** of women were tested for syphilis at ANC and **973 (2%)** were syphilis positive. The syphilis testing rate declined compared with the previous quarter due to stock outs of syphilis test kits. A new consignment of syphilis test kits is expected in Q2 2012.

Only **34, 570 (21%)** of women in this cohort attended the minimum of 4 focussed ANC visits.

13.2.1 HIV Ascertainment at ANC

128,959 (76%) of ANC attendees had their HIV status ascertained. Out of these, **9,047 (7%)** presented with a valid documented previous HIV test result and **119,912 (93%)** received a new HIV test result at ANC. A total of **10,959 (8%)** 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 settings.

The **128,959** women whose HIV status was ascertained at ANC represent **85%** of the expected 151,750 pregnant women in the population. The rate of HIV status ascertainment at ANC has decreased slightly from the previous quarters, probably due to on-going challenges with the supply of HIV test kits.

13.3 ARV Coverage at ANC

8,344 (76%) of HIV infected women attending ANC received maternal ARVs. This represents **46%** coverage of the estimated 18,210 HIV positive pregnant women in the population in this quarter (12% of 151,750). This is similar to the previous quarters. The main reason for this unsatisfactory coverage is mainly due to challenges with HIV test kit supplies, compounded by sub-optimal sensitivity of testing under field conditions at ANC.

Of the **8,344** women who received any ARVs, **699 (8%)** were reported to have taken a single tablet of nevirapine to take home and **1,885 (23%)** were reported to have started on AZT combination regimen. It has been confirmed that single dose nevirapine and AZT combination prophylaxis was still used at a few peripheral sites in the past 6 months, but it is suspected that this high proportion is explained by misclassification in facility reports and that the proportion on ART was underreported.

8,139 (74%) of 10,959 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. **5,930 (73%)** were found eligible and **5,760** 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. About 30% 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 at all sites.

9,834 (90%) of HIV infected women at ANC were on Cotrimoxazole Preventive Therapy.

1,314 (12%) 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 January and March 2012, **106,298** women were admitted for delivery to maternity; **5,238 (5%)** of these were referred to another facility before delivery, resulting in **126,273** total admissions to maternity during Q4 2011. The number of women attending maternity is equivalent to **79%** of the expected 151,750 deliveries in the population during the quarter. Out of all admissions, **116,447 (95%)** delivered at health facilities, while **6,143 (5%)** had already delivered before reaching a facility. The 116,447 (77%) of 151,750 facility deliveries exceeds the estimated rate of facility deliveries in the 2010 DHS (72%) 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 **34, 357 (94%)** deliveries were conducted by skilled birth staff, **490 (1%)** by paramedical staff and **1,853 (5%)** were not attended by any of the above (probably mainly among women who delivered before reaching maternity). **3,648 (9%)** of women developed obstetric complications. The most common leading complications were obstructed / prolonged labour (**1,244 cases; 34%**) and haemorrhage (**549 cases; 15 %**). A total of **37,411** babies were born, **36,053 (96%)** were singletons and **1,358 (4%)** were twins/multiples. There were **36,717 (98%)** live births and **694 (2%)** stillbirths. **36,380 (99%)** of babies born alive were discharged alive and **337 (1%)** died before discharge. **36,642 (>99%)** of women were discharged alive and **58 (<1%)** women died before discharge, which

is equivalent to a maternal mortality ratio of 102 per 100,000 live births among women attending maternity.

13.4.1 HIV Ascertainment at Maternity

108,660 (86%) women had their HIV status ascertained at maternity. Out of these, **103,659 (95%)** presented with a valid previous HIV test result and **5,001 (5%)** received a new HIV test result. A total of **9,397 (9%)** women were HIV positive and **99,263 (91%)** were negative. The **108,660** women whose HIV status was ascertained at maternity represent **72%** of the expected 151,750 women delivering in the population.

HIV exposure status was ascertained for **104,268 (87%)** out of 119,242 babies born and discharged alive. **8,445 (8%)** of these were born to a known HIV positive mother.

13.4.2 ARV Coverage at Maternity

A total of **7,830 (83%)** of HIV infected women attending maternity received ARVs during labour. This is a slight decrease from the previous quarter. Out of these, **6,112 (78%)** were on ART, **1,285 (16%)** were reported to have received the labour dose of AZT combination regimen, **433 (6%)** received single dose nevirapine. This is a complete reversal of the proportions seen in previous quarters and is consistent with the progressing roll out of Option B+. **7,549 (80%)** women were already taking ARVs during pregnancy: **6,031 (80%)** of these were on lifelong ART and **1,518 (20%)** had received AZT combination prophylaxis. ART should be taken for more than 4 weeks during pregnancy to ensure optimal effectiveness. **4,806 (80%)** of women on ART had received the respective regimen for over 4 weeks during pregnancy.

A total of **7,808 (92%)** 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). **6,605 (85%)** of HIV exposed infants received nevirapine (in line with Option B+) and **1,203 (15%)** started AZT combination regimen.

14 ART Access and Follow-Up Outcomes

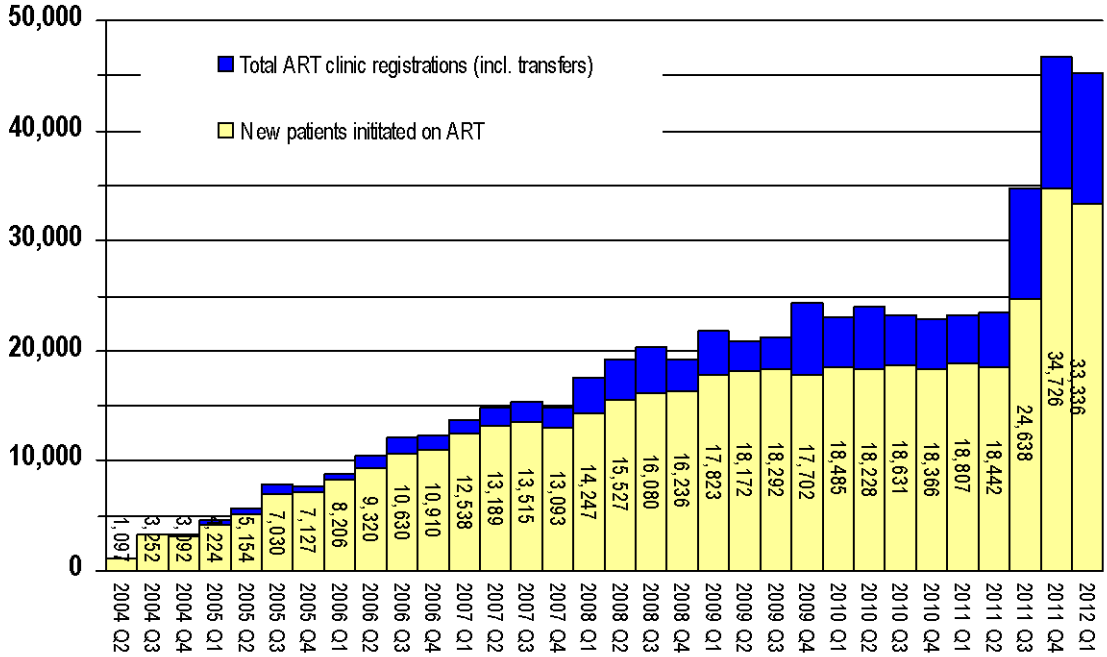
The full national data from the ART Program are shown in the **Annex**.

14.1 New ART Registrations during Q1 2012

By the end of March 2012, there were **595 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.

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.



Implementation of the 2011 Integrated Clinical HIV Guidelines started in July 2011 and triggered a massive surge in new ART initiations (see **Figure 1**). In Q1 2012, **33,336** patients initiated ART, which is a slight decline from the previous quarter and an indication that the program has caught up with the 'backlog' of patients who had suddenly become eligible for ART under the new guidelines. Establishment of many new static sites continued to cause a wave of transfers between sites: **11,671** patients transferred between clinics (**26%** of the total **45,149** new ART clinic registrations). Among all new registrations **30%** were males and **70%** females. **7,481 (24%)** of all females were pregnant and **7,223 (97%)** of these were started under ***Option B+*** in WHO stage 1 or 2, independent of their CD4 count. **258** pregnant women (the remainder) were otherwise eligible for ART, either due to WHO stage 3 or 4 conditions or because of a CD4 count <350. A further **4,478** women in WHO stage 1 or 2 were started because of breastfeeding, bringing the total number of women started under ***Option B+*** [3] to **11,701**. The number of pregnant women started on ART is expected to increase further over the next few quarters, while the number of breastfeeding women is expected to further decline as many sites will have caught up with initiating HIV positive women already during pregnancy.

A total of **22,778** patients **(51%)** started in WHO stage 1 or 2. This is an overall reduction from the previous quarter due to the lower number of breastfeeding women. The proportion of patients

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

starting in WHO stage 1 or 2 is expected to increase over the coming quarters due to the roll out of the Pre-ART program and the scheduled monitoring of CD4 counts in these patients. **18,631 (41%)** of patients registered in Q1 2012 started in WHO stage 3 and **2,963 (7%)** started in stage 4.

3,695 children were registered in Q1 2012, which was similar to the previous quarter. **258** 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 206 in Q4 2011 to **236** in Q1 2012). The number of infants in WHO stage 1 or 2 who started due to confirmed HIV infection through DNA-PCR decreased slightly from 231 in Q4 2011 to **198** in Q1 2012. Paediatric ART access is expected to further accelerate as implementation of the new guidelines over the next few quarters continues.

2,299 (5%) out of all ART clinic registrations were patients with TB: **1,248 (3%)** had a current and **1,051 (2%)** a recent history of TB. **571 (1%)** of patients registered had Kaposi's sarcoma.

14.2 Cumulative ART Registrations up to March 2012

By the end of March 2012, there were a cumulative total of **580,409** clinic registrations, representing **477,022 (82%)** patients who newly initiated ART and **102,579 (18%)** ART patients who transferred between clinics. **808** (<1%) out of all clinic registrations were patients who re-initiated ART after treatment interruption. Out of all ART clinic registrations, **37**% were males and **63**% were females, **91**% were adults and **9**% were children (<15 years). Private sector clinics accounted for **19,937** (3.4%) of total patient registrations.

14.3 ART Outcomes

By the end of March, 2012, a total of **347,983 patients were alive on ART**. This number includes **797** patients who were assumed to be 'in transit' as of the 31st **March 2012**, based on the difference between **103,376** patients *transferred out* and **102,579** 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 **477,022** patients ever initiated on ART, **347,983 (73%)** were retained alive on ART, **50,503 (11%)** had died, **77,645 (16%)** were lost to follow-up (defaulted) and **1,699** (<1%) were known to have stopped ART. An estimated **316,934** adults and **31,049** children (<15 years) were alive on ART by the end of **March 2012**

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

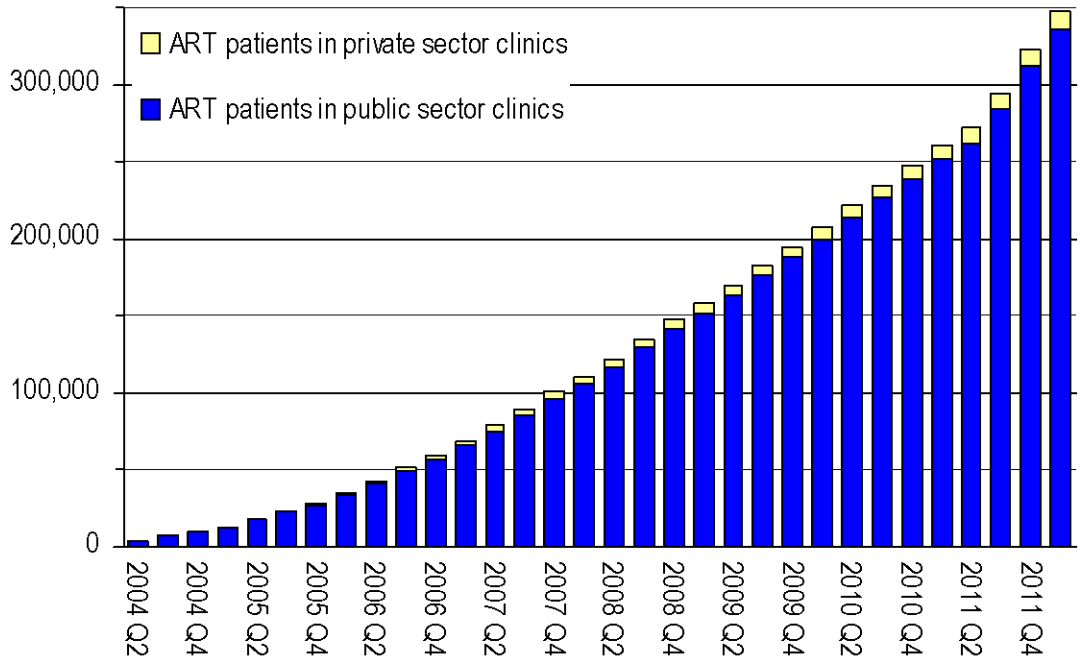


Figure 2 shows the increase of patients alive on ART by the end of each quarter. The number of patients alive on ART **increased by 24,345** in Q1 of 2012. This represents a slowing of the growth observed in the previous quarter (27,676) which is an indication that the program has caught up with the backlog of patients who became eligible for ART under the new guidelines. Growth of the patient cohort is expected to stabilize around 22,000 under the new PMTCT/ART guidelines. The workload at individual sites is expected to remain manageable due to the massive on-going decentralization to over 300 new sites.

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)

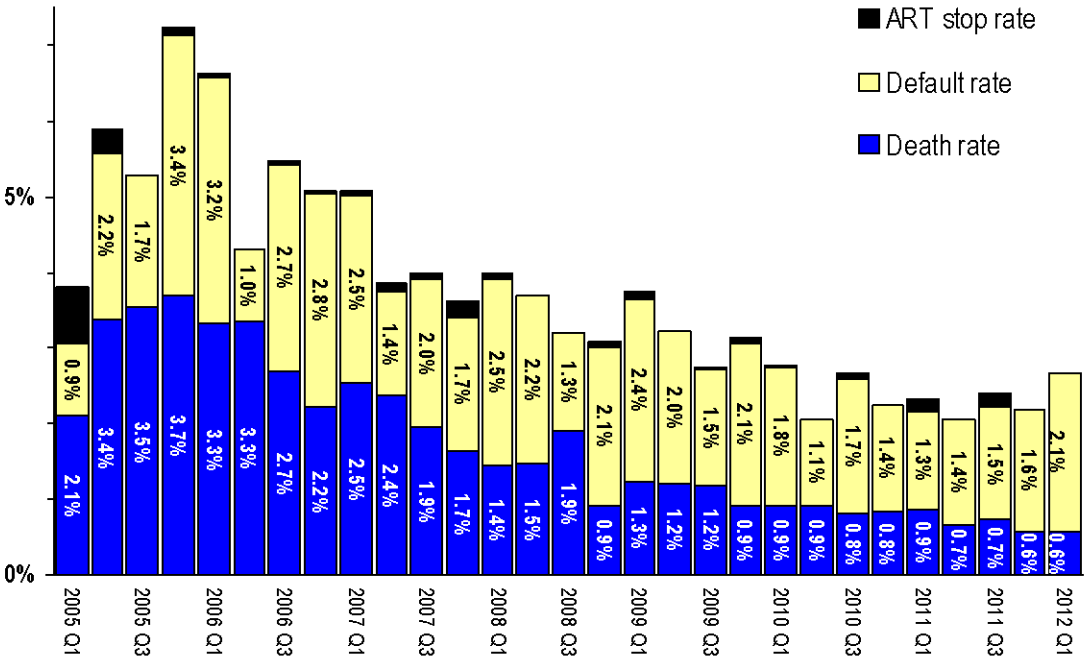


Figure 3 shows the considerable decrease of ART drop-out rates since the start of the national programme. During Q1 2012, there were **2,021** new deaths, **7,438** new defaulters, 0 new ART stops (and **135** new ART re-initiations). This translates into a quarterly death rate of **0.6%** and a defaulter rate of **2.1 %** among the patients alive and on treatment during this quarter. The default rate appears to have increased from the previous quarter. This is probably mainly driven by a misclassification of an increasing proportion of patients who transferred to another ART clinic without notifying their previous site. By end of March 2012, a cumulative **50,503 (11%)** patients were known to have died **77,645 (16%)** were lost to follow-up and **1,699** (**<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 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)

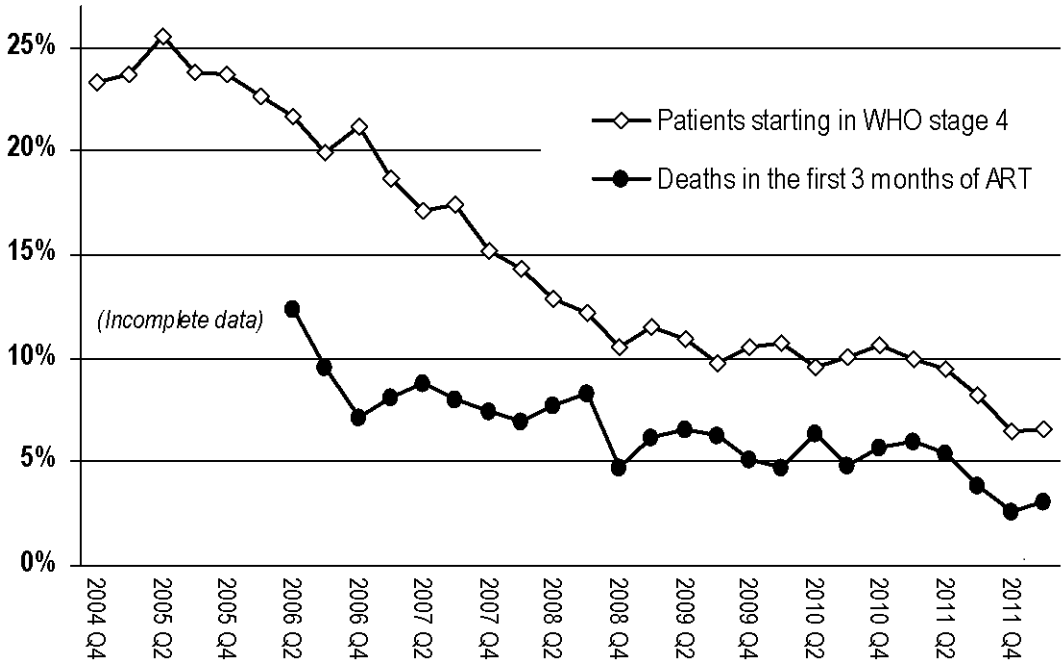


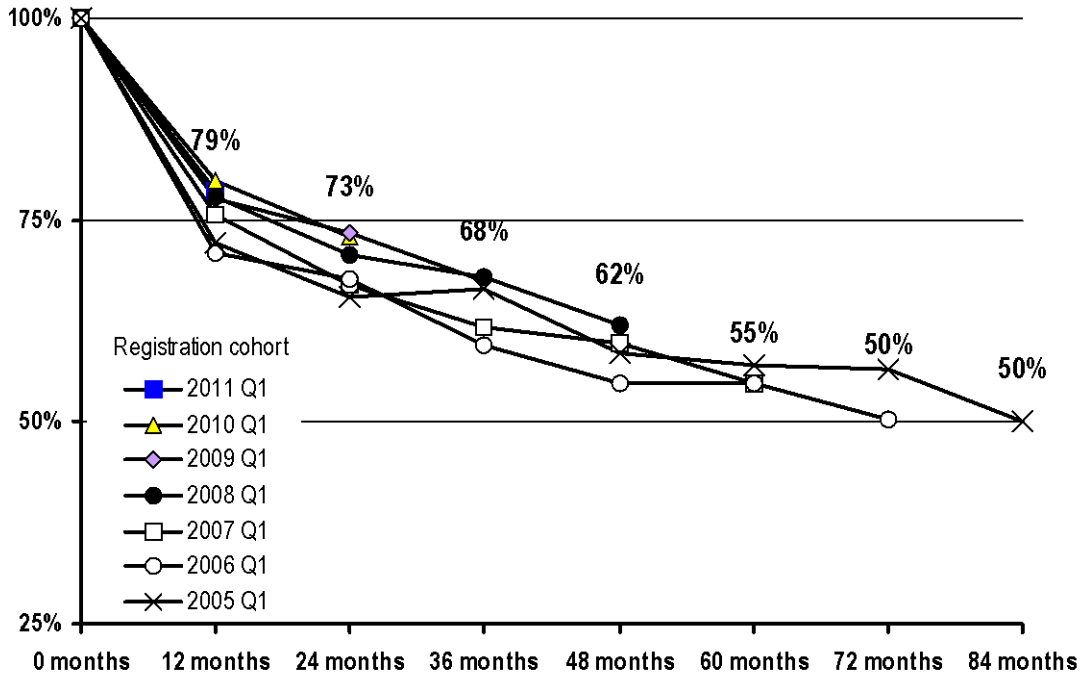
Figure 4 shows the considerable decline in **early mortality** since the start of the program. In 2006 Q2, 11% of new patients died within the first 3 months after ART initiation. There has been a remarkable decline in early mortality and the lowest point thus far was reached in Q4 2011. The decrease 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). Early mortality has increased very slightly from 2.6% in Q4 2011 to **3.1%** in Q1 2012. The overall decline correlates well with the decline in the proportion of patients starting ART in WHO clinical stage 4 from 25% in 2005 Q2 to **6.6%** in Q1 2012. 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

A 12, 24, 36, 48, 60, 72 and 84-month **'cohort outcome survival analysis'** was conducted for patients registered in Q1 of 2005, 2006, 2007, 2008, 2009, 2010 and 2011, respectively. A separate 12-month cohort outcome analysis was conducted for children who were under 15 years at the time of ART initiation and who registered for ART in Q1 2011. **80% of adults** and **74% of children** were retained alive on ART after 12 months on treatment. This is a slight increase for adults and a decrease for children from the previous quarter (78% and 77%). **Figure 5** shows the continuous improvement of long-term treatment outcomes over time. However, the current '12-month survival rate' is still below the WHO target of 85%.

Figure 5: Group cohort survival analysis: Proportion of patients retained alive on ART 12, 24, 36, 48, 60, 72 and 84 months after ART initiation



14.3.2 Secondary outcomes of patients retained on ART

Secondary outcomes are known for the **347,983** patients alive on ART who remained at their sites at end of the quarter. They are assumed to be similar for the 797 patients *in transit*.

ART Regimens

344,388 (99%) of patients were on first line and **1,624 (<1%)** were on second line regimens; **1,174 (<1%)** 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, **19,351 (6%)** were on paediatric formulations and **16,764 (87%)** 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 8% of all first line patients will be moved to paediatric formulations and over 90% of these will receive regimen 2P.

252,154 (78%) of 325,037 patients on adult formulation first line regimen were on regimen 1A (stavudine / lamivudine / nevirapine); **24,886 (8%)** were on regimen 2A (zidovudine / lamivudine / nevirapine), which is the main alternative regimen for patients with stavudine toxicity.

By the end of March 2012, **39,700 (12 %)** of patients on adult first line were receiving 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 **301,173 (87%)** out of all patients retained on ART and **269,059 (89%)** of these were classified as >95% adherent in Q1 2012. 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

229,783 (66%) patients on ART had information on drug side effects documented at their last clinic visit before end of March 2012 and **15,238 (7%)** of these had side-effects. 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 **98%** of HIV infected TB patients were receiving ART in Q1 2012. This estimate is based on the following triangulation of TB and ART program data:

TB Program Data: A total of **4,961** TB patients were registered during Q1 2012. Assuming an average HIV prevalence of 63% among TB patients, **3,307** TB patients were estimated to be HIV positive and therefore in need of ART. Given that **1,531** TB patients registered were already on ART at the time of starting TB treatment, 3,307 – 1,531 = **1,776** TB patients needed to initiate ART.

ART Program Data: An estimated **1,697** patients[4] started ART with a current or recent episode of TB during Q1 2012. This is **96%** (1,697 of 1,776) of the TB patients who needed to start ART. This means that a total of 1,531 + 1,697 = **3,228** (**98%**) of the estimated 3,307 HIV infected TB patients were receiving ART in Q1 2012.

TB / ART program triangulation *

HIV-burden among TB patients (estimated)

HIV negative (est. 33%)	1,654	33%
HIV positive (est. 66%) in need of ART	3,307	67%
Not on ART	79	2%
Total on ART (coverage)	3,228	98%
Already on ART (TB prog)	1,531	47%
Started ART within 24m of TB diagnosis (ART prog)	1,697	53%
ART initiations with current TB (ART prog)	921	54%
ART initiations after recent TB (ART prog)	776	46%

[4] 25% of the 2,299 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 2 out of 29 district-level reports could not be included in this quarterly report. The STI service data presented below are estimated to represent **90 %** of the total national STI program outputs.

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

16.1 STI Treatment Access and Coverage

Between January and March 2012, **38,900** STI clients were served at health facilities in Malawi, representing **39 %** of the 98,600 expected quarterly STI cases in the population. Out of all clients, **15,967 (41%)** were male and **22,933 (59%)** were female. **2,848 (12 %)** of female STI clients were pregnant. **24, 715 (64%)** of clients were 25 years and above, **10,246 (26%)** were 20-24 years and **3,907 (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: **3,907 (23%)** 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

30,345 (78%) of clients were index cases and **8,343 (22%)** were partners of index cases. **4,936 (59%)** of partners were asymptomatic. Considering that a total of **18,539** partner notification slips were issued, **45%** of those notified presented to the clinic. **27,687 (71%)** of clients presented with their first lifetime episode of STI, **7,547 (19%)** clients reported to have had an STI in over three months ago and **3,700 (10%)** of clients reported having had an STI within the last three months. Re-occurrence of an STI after a recent episode may be due to re-infection or treatment failure.

16.3 HIV Status

HIV status was ascertained for **19,036 (49 %)** clients and **6,376 (33 %)** of these were HIV positive. **1,548 (24%)** of positives were identified through a new test initiated at the STI clinic, while **4,828 (76%)** presented with a documented previous positive HIV test result. **2,629 (54%)** 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 syndromes were abnormal vaginal discharge (AVD) with **11,464 (28%)** cases and urethral discharge (UD) with **8,491 (21%)** cases. Similar to the previous quarters, balanitis, bubo, warts and neonatal conjunctivitis each accounted for 1 – 3% of cases.

17 Supply of HIV Program Commodities

1,450,000 Determine, **90,000** Uni-Gold test kits were distributed to the district pharmacies for onward distribution to all sites in January 2012. This was the regular 6-month consignment procured through the RCC Grant.

The scheduled quarterly distribution of ARVs (scheduled for December 2011) started with delay in January and took up to mid-March to complete. This was due to fuel shortages, impassable roads and the considerable increase in the number of sites which needed to be added to the supply routes. However, ARV supplies at the sites started to normalize from January as deliveries to sites with low stock levels were prioritized.

Physical stock counts for ARVs and drugs for HIV-related diseases were performed at all sites during the supervision visits in January 2012, which coincided with the distribution of ARVs and test kits. This means that the new consignment is partly included in the physical stock report. **Table 5** shows the total drug stocks found at the sites during the January 2012 site visits and the estimated consumption periods. Following the quarterly distribution cycle and maintaining a 2-month minimum stock level at the sites ,stocks of the adult first line regimens were estimated to last until May 2012 and the new paediatric first line (regimen 2P: zidovudine / lamivudine / nevirapine) was expected to last until June 2012.

The actual number of patients alive on ART by the end of March 2012 **(347,983)** exceeded by 7,191 **(2.1%)** the number projected for the quantification for procurement of ARVs **(340,792)**. **39,700** patients were on regimen 5A, which was **2,041 (5%)** more than projected in the procurement plan for the end of this quarter (37,659). This confirms that mid-term ART program projections have a high degree of accuracy. The national ART program forecast and quantification is scheduled to be updated in Q2 2012, based on the last 3 quarters of new program data since implementation of the 2011 guidelines.

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 less than 2 weeks from stock taking in January. 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.

Table 5: Total stocks of HIV program commodities at all sites visited during the 2012 Q1 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)	**3,433**	**31**	543	6.3
	AZT / 3TC 60 / 30mg tins (60 tabs)	**4,429**	**516**	2,018	2.2
	AZT / 3TC 300 / 150mg tins (60 tabs)	**32,955**	**343**	1,582	20.8
	AZT / 3TC / NVP 60 / 30 / 50mg tins (60 tabs)	**235,241**	**582**	41,910	5.6
	AZT / 3TC / NVP 300 / 150 / 200mg tins (60 tabs)	**98,638**	**346**	24,886	4.0
	d4T / 3TC 6 / 30mg tins (60 tabs)	**1,782**	**149**	513	3.5
	d4T / 3TC 30 / 150mg tins (15 tabs)	**29,847**	**488**	7,224	4.1
	d4T / 3TC 30 / 150mg tins (60 tabs)	**47,790**	**390**	6,680	7.2
	d4T / 3TC / NVP 6 / 30 / 50mg tins (60 tabs)	**19,485**	**257**	5,530	3.5
	d4T / 3TC / NVP 30 / 150 / 200mg tins (15 tabs)	**27,747**	**499**	7,224	3.8
	d4T / 3TC / NVP 30 / 150 / 200mg tins (60 tabs)	**887,898**	**619**	252,154	3.5
	EFV 200mg tins (60 tabs)	**2,172**	**81**	309	7.0
	EFV 600mg tins (30 tabs)	**46,497**	**357**	7,830	5.9
	LPV / r 100 / 25mg tins (60 tabs)	**4,789**	**24**	543	8.8
	LPV / r 200 / 50mg tins (120 tabs)	**14,164**	**71**	1,443	9.8
	NVP 200mg tins (60 tabs)	**9,388**	**149**	467	20.1
	TDF / 3TC 300 / 300mg tins (30 tabs)	**13,296**	**487**	1,673	7.9
	TDF / 3TC / EFV 300 / 300 / 600mg tins (30 tabs)	**150,456**	**601**	39,700	3.8
bottles	NVP 10mg/ml bottles (25 ml)	**64,179**	**573**	17,019	3.8
vials	Depo-Provera 150mg/1ml vials (1 each)	**321,877**	**406**		
	Bleomycine 15,000IU vials (1 each)	**531**	**20**		
	Ceftriaxone 1g vials (10 each)	**77,051**	**100**		
	Ganciclovir 250mg / ml vials (1 each)	**1,115**	**10**		
	Vincristine 1mg / 1ml vials (1 each)	**3,284**	**32**		
tabs	Aciclovir 400mg tins (500 tabs)	**5,528,838**	**399**		
	Ciprofloxacine 500mg blist packs (10 tabs)	**1,179,541**	**522**		
	Codeine 30mg tins (500 tabs)	**326,910**	**43**		
	Cotrimoxazole 100 / 20mg tins (100 tabs)	**12,828,432**	**464**	1,381,258	9.3
	Cotrimoxazole 400 / 80mg blist packs (60 tabs)	**2,380,160**	**55**	22,423,497	0.1
	Cotrimoxazole 400 / 80mg tins (1000 tabs)	**23,486,424**	**536**		
	Fluconazole 200mg tins (100 tabs)	**309,150**	**98**		
	Ibuprofen 200mg tins (100 tabs)	**1,562,834**	**129**		
	Isoniazid 300mg tins (1000 tabs)	**58,735**	**22**		
	Morphine 10mg blist packs (60 tabs)	**99,172**	**30**		
	Pyridoxine 25mg tins (100 tabs)	**264,640**	**97**		
sheets	Exposed child card (pink) bundles (500 sheets)	**69,162**	**517**		
	Pre-ART pat. card (green) bundles (500 sheets)	**104,436**	**512**		
	ART pat. card adult (yellow) bundles (500 sheets	**136,109**	**504**		
	ART pat. card paed. (blue) bundles (500 sheets)	**80,023**	**519**		
tests	Determine HIV1/2 boxes (100 each)	**211,447**	**443**		
	Uni-Gold HIV1/2 boxes (20 each)	**37,380**	**423**		
	SD Bioline HIV boxes (30 each)	**15,654**	**272**		
	Determine syphilis boxes (100 each)	**13,536**	**68**	56,361	0.2
	DBS collection kit (filter paper, lancet, etc.) bundl	**26,176**	**220**		
pieces	Condoms male boxes (1 each)	**7,666,332**	**362**		
	Condoms female boxes (1 each)	**990,245**	**362**		

* '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

A total of **240 participants** were trained in HTC between January and March 2012 and **232 qualified** as new HTC Providers. Out of all participants trained, 92 were health workers attending PITC trainings and 148 were lay counsellors attending the basic HTC training.

18.2 PMTCT/ART

311 health workers were trained in the new integrated PMTCT/ART curriculum between January and March 2012, bringing the total number of health workers re-trained in the new guidelines to **4,516**. These trainings were a continuation of initial wave of trainings aimed to establish at least 2 staff at each facility, enabling them to start implementing the new guidelines.

In March 2012, **60 trainers** were trained in an updated curriculum for Early infant Diagnosis (EID), comprising the basics of EID, DBS collection and transportation, planning, SMS technology and conducting EID training at district level. The 60 trainers were drawn from among the existing District ART and PMTCT coordinators.

18.3 STI

There was no basic STI training in Q1 2012.

19 Participants in Q1 2012 ART Supervision

Lloyd Chakwawa (CO, Malawi Defence Force)
Lincy Chalunda (CO, MOH)
Janet Chikonda (Nurse, MOH)
Rhoda Ching'ani (Community Nurse, Lighthouse)
Grace Chipanga (Nurse, Private)
Salome Chiwewe (Nurse, MOH, Ntchisi DH)
Stuart Chuka (CO, MBCA)
Tawina Crusoe (Nurse, Illovo)
Ruth Deula (Nurse, CHAM)
Peter Donda (CO, Dedza DH)
Michael Eliya (Natinal PMTCT Coodinator, MOH)
Flossy Fatch (RN, MOH)
Joe Gumulira (CO, MOH)
Suleiman Ibrahim (HIV Supervisor, Central West Zone Office)
Lilian Kachali (Nurse, MOH)
Vera Kajawo (Nurse, MOH)
Agnes Kalitsiro (Nurse, Mlambe Mission Hospital)
Mathilda Kamanga (Nurse, Army)
Henry Kamwetsa (CO, MOH)
Rehema Kansonkho (Nurse, MOH)
Oscar Kasiyamphanje (Nurse, CHAM)
Joseph Kasola (CO, MOH, Chitipa DH)
Catherine Kassam (MOH)
Rodrick Kaulele (CO, CHAM (Sister Tereza))
Absalom Kaunda (CO, MOH, Mzimba DHO)
Jean Kayamba (Nurse, MOH)
Prospere Lutala (HIV Zonal Supervisor, MOH, UNV)
Mercy Magombo (Nurse, MOH)
Mercy Makaika (Nurse, MOH)
Simon Makombe (ART officer, MOH, Dept for HIV and AIDS)
Amos Makwaya (CO, MOH)
Davie Maseko (CO, SOS)
Hannock Matupi (ARV clinician, MOH, Rumphi DH)
Benjamin Mazalo (CO, SUCOMA Clinic)
Loyna Mbewe (Nurse, MOH)
Charles Mfundisi (CO, MOH)
Eustice Mhango (ART officer, MOH, Dept for HIV and AIDS)
Dalitso Midiani (PMTCT Officer, MOH)
Eric Mittochi (CO (ART coord), MOH)
Everista Mkandawire (Nurse, MOH)
Christopher Mkwezalamba (CO, MOH)
Offrey Mnduwira (CO, Police)
Andraida Mtoseni (Nurse, MOH)
Ekwala Mubiala (HIV Zonal Supervisor, MOH, UNV)
Fainala Muyila (Nurse, MOH)
Ruockia Mwachumu (Nurse, MOH Nsanje DHO)
Linda Mwafulirwa (Nurse, CHAM)
Mapay Ngalala (HIV Zonal Supervisor, MOH, UNV)
Stanley Ngoma (CO, MOH)
Joseph Njala (HIV fellow, MOH, Dept for HIV and AIDS)
Grace Juma Nkhata (Nurse, MOH)
Angela Nkhoma (Nurse, MOH)
Mourine Gumbo Ntambo (Nurse, MOH)
Jonas Nyasulu (IT Fellow, MOH, Dept for HIV and AIDS)
Sabina Phiri (Nurse, MOH)
Abdul Richard (CO, MOH)
Monica Simfukwe (Nurse, MOH, Chintheche RH)
Mark Suzumire (CO, MOH)
Lyson Tenthani (M&E Fellow, MOH, Dept. for HIV and AIDS)
Gerald Zomba (HIV Fellow, MOH, Dept. for HIV and AIDS)

Report compiled by:

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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.

28th June 2012

20 Appendix (Full National HIV Program Data)

2012 Q1 HTC Report

			National coverage	
			Population denominator	
Total Number of Clients	440,763		3,772,503	12%
Gender and Pregnancy				
Males	143,650	33%	1,891,196	8%
Females	297,113	67%	1,881,306	16%
Females Non Pregnant	156,145	53%	1,274,306	12%
Females Pregnant	140,968	47%	151,750	93%
Age				
25 years and above	233,223	53%	1,256,106	19%
15 - 24 years	172,925	39%	789,500	22%
Children Below 15	34,559	8%	872,055	4%
18months - 14 years	26,884	78%	41,215	65%
Below 18months	7,675	22%	830,840	1%
HIV Test History				
Previously tested	254,276	58%		
Never tested before	186,487	42%		
Number of people ever tested since 2007	3,783,813			
Counselling Type				
Counseled with partner	65,859	15%		
Counseled alone	374,904	85%		
HIV Test Resuts				
Single test negative	374,440	85%		
First and second test negative	6,946	2%		
First and second test positive	53,923	12%		
First and second test discordant	10,448	2%		
Final Result				
No of children <18months with antibody positive	965	0%		
Positive	47,629	11%		
Negative	391,922	89%		
Inconclusive	281	0%		
Referrals (multiple possible)				
ARVs	38,433			
TB	3,106			
PMTCT	8,151			
Other	9,717			

HIV Care Clinic (HCC) cohort analysis

Malawi (national)

2012 Q1 (Quarter)

Registration details

*

HCC clinic registrations

Total HCC registrations	24,467	100%

Registration type

Patients enrolled first time	23,867	98%
Patients re-enrolled	85	0%
Patients transferred in	515	2%

Sex

Males (all ages)	9,522	39%
Females (all ages)	14,945	61%
Non-pregnant	14,882	100%
Pregnant	63	0%

Age at registration

Adults 15+ yrs	13,631	56%
Children 0-14 yrs	10,844	44%
Children 24 months - 14 years	1,523	14%
Children below 24 months (exposed children)	9,321	86%
Children 2 - below 24 months	5,839	63%
Infants below 2 months	3,482	37%

Reason for HCC registration

Exposed infants	9,382	38%
Confirmed infected patients (pre-ART)	15,085	62%

* Subgroups may not add to 100% due to rounding

HIV Care Clinic (HCC) cohort analysis

Malawi (national)

2012 Q1 (Cumulative)

Registration details *

HCC clinic registrations

Total HCC registrations	110,952	100%

Registration type

Patients enrolled first time	109,866	99%
Patients re-enrolled	188	0%
Patients transferred in	898	1%

Sex

Males (all ages)	41,413	37%
Females (all ages)	69,539	63%
Non-pregnant	68,882	99%
Pregnant	657	1%

Age at registration

Adults 15+ yrs	72,701	66%
Children 0-14 yrs	38,251	34%
Children 24 months - 14 years	6,423	17%
Children below 24 months (exposed children)	31,828	83%
Children 2 - below 24 months	20,727	65%
Infants below 2 months	11,101	35%

Reason for HCC registration

Exposed infants	30,838	28%
Confirmed infected patients (pre-ART)	80,114	72%

Pre-ART follow-up outcome *

Primary follow-up outcomes

Total retained in pre-ART	34,166	43%
Started ART	32,830	41%
Defaulted	11,083	14%
Died	1,257	2%

Transfers between sites

Total not transferred out	79,336	99%
Transferred out	778	1%

* Subgroups may not add to 100% due to rounding

HIV exposed child follow-up

Malawi (national)

2012 Q1 (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	5,162	100%

CPT status

On CPT	4,040	78%
Not on CPT	1,122	22%

HIV status

Current HIV infection status unknown	4,933	96%
HIV infection not confirmed, not ART eligible	4,922	100%
HIV infection not confirmed, ART eligible (PSHD)	11	0%
Current HIV infection status known	229	4%
Confirmed not infected	204	89%
Confirmed infected (ART eligible)	25	11%

ART eligibility summary

Not eligible for ART	5,126	99%
ART eligible	36	1%
ART not initiated	24	67%
Initiated ART	12	33%

Primary follow-up outcome

Discharged uninfected	8	0%
Continue follow-up	4,640	90%
Started ART	12	0%
Defaulted	463	9%
Died	13	0%

Transfers between sites

Total not transferred out	5,136	99%
Transferred out	26	1%

Age 12 months

Age cohort outcomes

*

Total children in birth cohort

Total children registered	2,196	100%

CPT status

On CPT	1,524	69%
Not on CPT	672	31%

HIV status

Current HIV infection status unknown	1,948	89%
HIV infection not confirmed, not ART eligible	1,922	99%
HIV infection not confirmed, ART eligible (PSHD)	26	1%
Current HIV infection status known	248	11%
Confirmed not infected	210	85%
Confirmed infected (ART eligible)	38	15%

* Subgroups may not add to 100% due to rounding

Age cohort outcomes *

ART eligibility summary

Not eligible for ART		2,132	97%
ART eligible		64	3%
	ART not initiated	16	25%
	Initiated ART	48	75%

Primary follow-up outcome

Discharged uninfected	68	3%
Continue follow-up	1,870	85%
Started ART	48	2%
Defaulted	187	9%
Died	16	1%

Transfers between sites

Total not transferred out	2,189	100%
Transferred out	7	0%

Age 24 months

Age cohort outcomes *

Total children in birth cohort

Total children registered	586	100%

CPT status

On CPT	394	67%
Not on CPT	192	33%

HIV status

Current HIV infection status unknown		188	32%
	HIV infection not confirmed, not ART eligible	179	95%
	HIV infection not confirmed, ART eligible (PSHD)	9	5%
Current HIV infection status known		398	68%
	Confirmed not infected	365	92%
	Confirmed infected (ART eligible)	33	8%

ART eligibility summary

Not eligible for ART		544	93%
ART eligible		42	7%
	ART not initiated	15	36%
	Initiated ART	27	64%

Primary follow-up outcome

Discharged uninfected	347	63%
Continue follow-up	90	16%
Started ART	27	5%
Defaulted	67	12%
Died	21	4%

Transfers between sites

Total not transferred out	552	94%
Transferred out	34	6%

Antenatal Care

Malawi (national)

2012 Q1 (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	155,802	100%

ANC cohort analysis *

Total women completing ANC in the reporting period

Total women in booking cohort	169,251	100%

Visits per woman

Women with 1 visit	37,454	22%
Women with 2 visits	46,495	27%
Women with 3 visits	50,732	30%
Women with 4 visits	28,202	17%
Women with 5+ visits	6,368	4%

Trimester of first visit

Started ANC 0-12 wks	14,197	8%
Started ANC 13+ wks	155,054	92%

Pre-eclampsia

No pre-eclampsia	167,045	99%
Pre-eclampsia	2,206	1%

TTV doses

0-1 TTV doses	71,238	42%
2+ TTV doses	98,013	58%

SP tablets

0-5 SP tablets	120,974	71%
6+ SP tablets	48,277	29%

FeFo tablets

0-119 FeFo tablets	158,651	94%
120+ FeFo tablets	10,600	6%

Syphilis status

Not tested for syphilis	112,308	66%
Tested for syphilis	56,943	34%
Syphilis negative	55,970	98%
Syphilis positive	973	2%

HIV status ascertainment

HIV status not ascertained	40,292	24%
HIV status ascertained	128,959	76%
Valid previous test result	9,047	7%
Previous negative	5,226	58%
Previous positive	3,821	42%
New test at ANC	119,912	93%
New negative	112,774	94%
New positive	7,138	6%

HIV status summary

Total women HIV negative	118,000	92%
Total women HIV positive	10,959	8%

* Subgroups may not add to 100% due to rounding

Antenatal Care

Malawi (national)

2012 Q1 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

ANC cohort analysis

*

ART eligibility

Unknown		2,820	26%
ART eligibility determined		8,139	74%
	Not eligible	2,209	27%
	Eligible	5,930	73%

CPT status

Not on CPT		1,125	10%
On CPT		9,834	90%

Final PMTCT regimen mother

None		2,615	24%
Any ARVs		8,344	76%
	sdNVP	699	8%
	AZT	1,885	23%
	ART	5,760	69%

Baby's ARVs dispensed

No		9,645	88%
Yes		1,314	12%

Maternity

Malawi (national)

2012 Q1 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternal details

*

Admissions in the reporting period

Total admissions (referrals double-counted)		111,536	100%
	Not referred to other site (total women)	106,298	95%
	Referred out before delivery (multiple admissions)	5,238	5%

HIV status ascertainment

HIV status not ascertained		16,689	15%
HIV status ascertained		94,847	85%
	Valid previous test result	89,571	94%
		Previous negative	80,849	90%
		Previous positive	8,722	10%
	New test at maternity	5,276	6%
		New negative	4,889	93%
		New positive	387	7%

HIV status summary

Total women HIV negative		85,738	90%
Total women HIV positive		9,109	10%

ARVs during pregnancy (among HIV pos)

None		1,906	21%
Any ARVs		7,203	79%
	AZT combination prophylaxis	293	4%
		AZT 0-3 weeks	173	59%
		AZT 4+ weeks	120	41%
	ART	6,910	96%
		ART 0-3 weeks	964	14%
		ART 4+ weeks	5,946	86%

ARVs during labour (among HIV pos)

None		1,742	19%
Any ARVs		7,367	81%
	sd NVP	126	2%
	NVP + AZT + 3TC	129	2%
	ART	7,112	97%

Obstetric complications

None		100,810	90%
Any complications		10,726	10%
	Haemorrhage	1,546	14%
	Obstr / prol labour	3,719	35%
	(pre-) Eclampsia	530	5%
	Ruptured uterus	143	1%
	Maternal sepsis	127	1%
	Other	4,661	43%

Referred out before delivery

No		106,298	95%
Yes		5,238	5%

* Subgroups may not add to 100% due to rounding

Maternity

Malawi (national)

2012 Q1 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternal details

*

Staff conducting delivery

Category A: MO, CO, nurse/midwife, MA	99,635	94%
Category B: PA, WA, HSA	1,423	1%
Category C: Other	5,240	5%

Mother survival

Alive	106,170	100%
Died	128	0%

Infant details

*

Single babies / multiple deliveries

Total babies delivered	108,449	100%
Single babies	104,263	96%
Twin / multiple babies	4,186	4%

Delivery place

Total deliveries at a health facility	102,644	95%
This facility	102,334	100%
Other facility	310	0%
Total deliveries before reaching the facility	5,805	5%
In transit	3,386	58%
Home / TBA	2,419	42%

Delivery mode

Spontaneous vaginal	98,919	91%
Vacuum extraction	1,382	1%
Breech	2,146	2%
Caesarean section	6,002	6%

Infant complications

None	95,943	88%
Total infants with complications	12,506	12%
Prematurity	3,693	30%
Weight less 2500g	4,286	34%
Asphyxia	2,507	20%
Sepsis	549	4%
Other	1,471	12%

Infant survival

Total live births	106,360	98%
Discharged alive	105,392	99%
Neonatal deaths	968	1%
Stillbirths	2,089	2%
Stillbirth, fresh	1,245	60%
Stillbirth, macerated	844	40%

Maternity

Malawi (national)

2012 Q1 (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	14,376	14%
Infants with known HIV exposure status	91,016	86%
Not HIV exposed	83,039	91%
HIV exposed	7,977	9%
Received no ARVs	800	10%
Received ARVs	7,177	90%
Nevirapine	6,955	97%
AZT combination regimen	222	3%
Started zidovudine only	75	34%
Started zidovudine + nevirapine	147	66%

Breastfeeding initiated

No	5,173	5%
Yes	103,276	95%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2012 Q1 (Quarter)

Registration details

*

ART clinic registrations

Total ART clinic registrations	45,149	100%

Registration type

First time ART initiations (total patients)	33,336	74%
ART re-initiations	142	0%
ART transfers in	11,671	26%

Sex

Males	13,619	30%
Females	31,530	70%
Non-pregnant	24,049	76%
Pregnant	7,481	24%

Age at ART initiation

Adults 15+ yrs	41,454	92%
Children 0-14 yrs	3,695	8%
Children 2-14 yrs	2,669	72%
Children below 24 mths	1,026	28%

Reason for starting ART

Presumed severe HIV Disease	236	1%
Confirmed HIV infection	44,913	99%
WHO stage 1 or 2	22,778	51%
Total lymphocytes <threshold	19	0%
CD4 below threshold	10,602	47%
CD4 unknown or >threshold	12,157	53%
PCR infants	198	2%
Children 12-23 mths	258	2%
Pregnant women	7,223	59%
Breastfeeding mothers	4,478	37%
WHO stage 3	18,631	41%
WHO stage 4	2,963	7%
Unknown / reason outside of guidelines	541	1%

TB at ART initiation

Never TB / TB > 24 months ago	42,850	95%
TB within the last 24 months	1,051	2%
Current episode of TB	1,248	3%

Kaposi's sarcoma at ART initiation

No KS	44,578	99%
Patients with KS	571	1%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2012 Q1 (Cumulative)

Registration details

*

ART clinic registrations

Total ART clinic registrations	580,409	100%

Registration type

First time ART initiations (total patients)	477,022	82%
ART re-initiations	808	0%
ART transfers in	102,579	18%

Sex

Males	216,819	37%
Females	363,590	63%
Non-pregnant	330,914	91%
Pregnant	32,676	9%

Age at ART initiation

Adults 15+ yrs	528,622	91%
Children 0-14 yrs	51,787	9%
Children 2-14 yrs	41,230	80%
Children below 24 mths	10,557	20%

Reason for starting ART

Presumed severe HIV Disease	2,129	0%
Confirmed HIV infection	578,280	100%
WHO stage 1 or 2	183,488	32%
Total lymphocytes <threshold	194	0%
CD4 below threshold	149,889	82%
CD4 unknown or >threshold	33,405	18%
PCR infants	2,218	7%
Children 12-23 mths	1,054	3%
Pregnant women	17,322	52%
Breastfeeding mothers	12,811	38%
WHO stage 3	313,484	54%
WHO stage 4	74,164	13%
Unknown / reason outside of guidelines	7,144	1%

TB at ART initiation

Never TB / TB > 24 months ago	524,378	90%
TB within the last 24 months	37,192	6%
Current episode of TB	18,839	3%

Kaposi's sarcoma at ART initiation

No KS	565,313	97%
Patients with KS	15,096	3%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2012 Q1 (Cumulative)

ART outcomes

*

Primary follow-up outcomes

Total alive on ART		347,983	73%
	Alive on ART at site of last registration	347,186	100%
	ART patients in transit between sites	797	0%
Defaulted		77,645	16%
Stopped ART		1,699	0%
Total died		50,503	11%
	Died month 1	14,117	28%
	Died month 2	9,147	18%
	Died month 3	5,086	10%
	Died month 4+	22,153	44%

Transfers between sites

Total not transferred out		477,033	82%
Transferred out		103,376	18%

ART regimens

First line regimens		344,388	99%
	Adult formulation	325,037	94%
		Regimen 1A	252,154	78%
		Regimen 2A	24,886	8%
		Regimen 3A	6,680	2%
		Regimen 4A	1,150	0%
		Regimen 5A	39,700	12%
		Regimen 6A	467	0%
	Paed. formulation	19,351	6%
		Regimen 1P	2,212	11%
		Regimen 2P	16,764	87%
		Regimen 3P	205	1%
		Regimen 4P	170	1%
Second line regimens		1,624	0%
	Adult formulation	1,443	89%
		Regimen 7A	1,206	84%
		Regimen 8A	237	16%
	Paed. Formulation	181	11%
		Regimen 9P	181	100%
Other regimen (adult / paed)		1,174	0%

Adherence

Adherence not recorded		46,013	13%
Adherence recorded		301,173	87%
	0-6 doses missed	269,059	89%
	7+ doses missed	32,114	11%

ART side effects

Side effects not recorded		117,403	34%
Side effects recorded		229,783	66%
	No side effects	214,545	93%
	Any side effects	15,238	7%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2012 Q1 (Cumulative)

ART outcomes

*

ICF (current TB status among ART patients)

Intensified case finding not done		38,711	11%
Intensified case finding done		308,475	89%
	TB not suspected	301,605	98%
	TB suspected	1,800	1%
	TB confirmed	5,070	2%
		TB confirmed, not on treatment	3,502	69%
		TB confirmed, on TB treatment	1,568	31%

* Subgroups may not add to 100% due to rounding

2012 Q1 STI Report

			National coverage	
			Population denominator	
Total Number of Clients	38,900		98,604	39%
Gender and Pregnancy				
Males	15,967	41%	37,993	42%
Females	22,933	59%	60,612	38%
Females Non Pregnant	20,085	88%		
Females Pregnant	2,848	12%		
Age				
Age A (<20 years)	3,907	10%	17,323	23%
Age B (20 - 24 years)	10,246	26%	24,952	41%
Age C (25 years and above)	24,715	64%	56,799	44%
Type				
Index cases	30,345	78%		
Partners	8,343	21%		
Asymptomatic	4,936	59%		
Symptomatic	3,407	41%		
Partner Notification				
Partner Slips issued	18,539			
Partners	8,343	45%		
STI History				
Never	27,687	71%		
Old (previous STI >3months ago)	7,547	19%		
Recent (previuos STI <3months ago)	3,700	10%		
HIV Status				
HIV status unknown	19,848	51%		
HIV Status ascertained	19,036	49%		
Total HIV negative (new test)	12,660	67%		
Total HIV positive	6,376	33%		
Total new HIV positive	1,548	24%		
Total previous HIV positive	4,828	76%		
Not on ART	2,199	46%		
On ART	2,629	54%		
Syndromes				
Total Syndromes*	40,588			
Abnormal Varginal Discharge Total	11,464	28%		
Low Risk	4,784	42%		
High Risk	6,680	58%		
Genital Ulcer Disease	7,153	18%		
Urethral Discharge	8,491	21%		
Lower abdominal Pain	7,078	17%		
Scrotal Swelling	670	2%		
Bubo	803	2%		
Balanitis	1,120	3%		
Neonatal Conjunctivitis	421	1%		
Warts	511	1%		
Syphillis	1,108	3%		
Other	1,769	4%		
Referrals (multiple possible)				
Repeat HTC[&]	9,081	28%		
ART	1,076			
Lab	693			
PMTCT	189			
Gynae	507			
Surgical	195			
Other	918			

** 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