Government of Malawi Ministry of Health

Integrated HIV Program Report
July - September 2013

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1 Executive Summary

This is the 9th quarterly HIV Program report after implementation of the 2011 Integrated Clinical HIV Guidelines in July 2011. A summary of the key achievements between **July and September 2013** is provided below:

- Scale-up of integrated HIV services had reached the following number of sites:
  - **825** static (607 within and 218 outside of health facilities) and 534 outreach HTC sites
  - **675** (static) ART sites
  - **590** PMTCT sites (Option B+)
  - **628** Pre-ART sites
  - **605** sites with HIV-exposed child follow-up
- **405,278** persons were tested and counselled for HIV and **36,807 (9%)** were HIV positive; **145,572 (36%)** people tested for the first time.
- **12,646 (95%)** of 13,299 blood units collected were screened for HIV, hepatitis B and syphilis.
- **128,022 (83%)** of 153,561 women at ANC had their HIV status ascertained; **9,988 (8%)** of these were HIV positive. **122,392 (93%)** of 132,279 women at maternity had their HIV status ascertained; **9,337 (8%)** of these were HIV positive.
- **25,551** patients started ART during this quarter; this is similar to the previous quarter (**26,802**).
- **459,261** patients were alive and on ART by end of September 2013. This is equivalent to **74%** coverage of the estimated 602,000 population in need of ART (all ages).[1] Estimated ART coverage among children (<15 years) and adults was **47%** and **81%**, respectively.
- **78%** of adults and **80%** of children were retained alive on ART at 12 months after initiation.
- **309,127 (73%)** of 424,961 on first line adult ART were on regimen 5A (TDF/3TC/EFV).
- The proportion of ART patients with documented side effects declined from 7% to **2%** compared with the previous quarter.
- A total of **11,788** HIV positive pregnant women were on ART: **5,041 (43%)** of these were already on ART when getting pregnant and **6,747 (57%)** started ART during pregnancy/delivery. This is equivalent to **75%** ART coverage among the estimated 15,750 HIV infected pregnant women in Malawi this quarter. **6,429** (95%) of pregnant women started ART due to ***Option B+*** (in WHO clinical stage 1 or 2) and **318** (5%) due to a low CD4 count and/or WHO clinical stage 3 or 4.
- An additional **1,831** breastfeeding women started ART due to ***Option B+*** (in WHO stage 1/2)
- **6,057 (79%)** of 7,677 women started under ***Option B+*** were retained at **6 months** after ART initiation; **6,630 (72%)** of 9,205 were retained at **12 months** after ART initiation.
- **8,564 (7%)** of infants discharged alive from maternity were known to be HIV exposed, **7,941 (93%)** of these received ARV prophylaxis (nevirapine). **5,734 (67%)** were enrolled in exposed child follow-up before age 2 months.
- A total of **10,258** HIV exposed children and **8,884** pre-ART patients were enrolled for follow-up in *HIV Care Clinics (HCC)* during this quarter.
- **162** medical staff were newly trained and certified in PMTCT/ART this quarter. This brings the total number trained in the 2011 guidelines to **5,985**.
- **1,243** HTC providers were re-trained using the *HTC Skills Intensive Training* curriculum, bringing the total number re-trained to **3,776**.
- A total of **921** staff at **235** sites in 19 districts received clinical mentoring during. 104 staff graduated, 250 were in intensive and 350 in continuation phase this quarter.

[1] 2013 Spectrum estimates based on current definition of eligibility for ART in Malawi (CD4<350, Option B+, UTT for U2).

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 with HIV and hepatitis B co-infection.

- 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. The full transition to regimen 5A started in July 2013.

- 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.

Malawi has started reviewing the National Clinical HIV Guidelines following the release of the *WHO Consolidated Guidelines on the Use of ARVs for Treating and Preventing HIV Infection* in June 2013. Implementation of updated national protocols is planned for January 2014.

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 implementation of 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 program
- Semi-structured feedback and performance rating for the supervision teams by facility staff

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 usually 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

682 public and private sector facilities were visited for **clinical HIV program supervision** between 7th and 25th October 2013. The large number of sites was covered by **72** supervisors working in **20** teams. The teams spent a total of **1,785 working hours** at the sites. Each site visit lasted on average

2.6 hours, but up to 2 days were spent at the busiest sites. **206** clinic teams were awarded a *Certificate of Excellence* for **excellent performance.** The number of sites with excellent performance decreased from the previous quarter due to a more rigorous application of performance criteria. **58** sites had significant weaknesses and were rated to require **intensive mentoring**. A similar number of sites were noted in the previous quarter. The capacity to provide site mentoring will need to be further expanded.

Table 1: Outcomes of integrated HIV services supervision for 2013 Q3

Zone	Total facil. visited*	Supervision hours spent at facilities		Performance (# and % of sites)	
		Total	Average per site	Excellent perform.	Mentoring needed
NZ	119	258	2.2	16 13%	16 13%
CEZ	93	235	2.6	30 32%	17 18%
CWZ	160	392	2.5	45 28%	7 4%
SEZ	155	458	3	52 34%	8 5%
SWZ	155	442	2.9	63 41%	10 6%
Malawi	682	1,785	2.6	206 30%	58 9%

* 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. **94** sites had cumulatively registered more than 2,000 ART patient and **32** of these had registered more than 5,000. **39 (41%)** of these high burden sites were using electronic data system for ART (EDS). Some NGO supported sites were using custom tools compatible with the national standard reporting requirements.

4 Inventory of Sites and Services

A total of **825** static sites were reporting HTC services in Q3 2013 and **218** of these were outside of health facilities. In addition, HTC was provided at 534 mobile or outreach sites.

Table 2: Facilities with integrated HIV services in the 5 Zones. Availability of services defined by performance (at least 1 patient enrolled) during 2013 Q3

Zone	Total fac.(1)	Facilities providing HIV services				CD4 count machines (2)		
		Exp. child	Pre-ART	PMTCT B+	ART	Installed	Functional	Results
NZ	125	109 87%	114 91%	105 84%	117 94%	20 16%	19 95%	2,719
CEZ	94	89 95%	89 95%	86 91%	93 99%	11 12%	10 91%	2,816
CWZ	160	128 80%	135 84%	130 81%	157 98%	29 18%	29 100%	6,886
SWZ	155	129 83%	142 92%	125 81%	155 100%	21 14%	21 100%	18,053
SEZ	161	150 93%	148 92%	144 89%	153 95%	19 12%	18 95%	8,499
Malawi	695	605 87%	628 90%	590 85%	675 97%	100 14%	97 97%	38,973

(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.

Table 2 shows the distribution of the **695** sites designated to provide clinical HIV services in Q3 2013, by zone. At the national level, there were **675** (static) sites with at least one patient on ART, **590** sites had enrolled women under PMTCT Option B+; **628** sites were providing pre-ART services and **605** had enrolled HIV exposed children for follow-up. ART services were now available at almost all designated sites in the 5 zones. The SW had reached 100% of designated sites with ART services and the CE zone was leading in terms of sites that had started women under Option B+(91% of designated sites).

CD4 count machines (including 'point of care' machines) were installed at **100** sites, and 97 **(97%)** of these had produced at least 1 result during Q3. The total number of CD4 results produced increased from 37,486 in Q2 to **38,973** during Q3. 46% of these outputs were generated in the SW zone, implying that many CD4 machines continued to be down or to be running considerably below capacity.

5 HIV Testing and Counselling Program Outputs

405,278 people[2] were tested and counselled for HIV between July and September 2013. **36, 807** (9.1%) of all people tested were HIV positive.

Out of 405,278 people tested and counselled, **34%** were males and **66%** were females. **52%** of females were pregnant. The proportion of males (52%) and non-pregnant females (48%) was very similar, implying gender balanced access to HTC services. Pregnant women have to be excluded from the comparison of male and female access to HTC because testing among pregnant women is almost entirely provider-initiated and there is no comparable access route targeting males.

[2] Reports from the HTC register are based on client encounters. It is not possible to de-duplicate people who access HTC multiple times in the reporting period. However, very few individuals come for repeat testing in less than 3 months and the number of HTC encounters in one quarter is therefore assumed to represent individuals.

55% of all people tested and counselled were 25 years and above, **38%** were between 15-24 years and **8%** were children below 15 years. **94,182** (23%) accessed HTC with their partners (as a couple). This is an increase from in the previous quarter (20%).

145,572 (36%) of 405,278 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 **4,831,242** 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 DNA-PCR testing for Early Infant Diagnosis of HIV (EID)

DNA-PCR testing for the National EID Program is performed at 6 labs (Mzuzu Central Hospital, Mzimba District Hospital, Kamuzu Central Hospital, Queen Elizabeth Central Hospital, DREAM Blantyre and University of North Carolina in Lilongwe). EID counsellors collect infant blood samples as dried blood spots on filter paper. Health facilities are requested to maintain a standard EID DNA-PCR logbook to document EID samples and to track results. The logbook includes the dates of collection, dispatch, receipt of result from the lab and communication of the result to the mother. For the first time this quarter, supervision teams were asked to collect basic data from these logbooks.

464 (76%) of 605 sites with HIV exposed children in follow-up had collected and recorded at least 1 DNA-PCR sample during Q3 2013. A total of **7,492** DNA-PCR samples were collected and recorded. By the time the logbooks were reviewed (between 2 and 4 weeks after the end of the quarter), results had been received at the sites for **4,622 (62%)** of these specimens and **2,593 (56%)** of these results had been communicated to the mother. The proportion of results received at the sites was **76%**, **70%** and **39%** for samples collected in July, August and September, respectively. A total of **172 (4%)** results received at the sites were positive.

A total of **8,758** DNA-PCR test results were dispatched from the **6 laboratories** in Q3 2013. This number exceeds by 1,266 the number of samples recorded in the DNA-PCR logbooks at health facilities during this quarter. Detailed data on the specimens processed were available from the lab management information system (LMIS) at MCH, MDH, KCH and QECH. These 4 labs dispatched a total of **7,639** DNA-PCR results to health facilities in Q3 2013. **4,843 (63%)** of these results were from samples collected in Q3 2013, while 2,766 (37%) were from samples collected in the previous quarters (for 30 results the collection date was missing). The median time between sample collection and dispatch of the result was **19 days**; 75% of results were dispatched between 13 and 30 days after sample collection. This is a considerable reduction in turnaround time from the previous quarter (median 30 days).

3,561 (47%) of all results were from infants under 2 months old at the time of sample collection. 2,754 (36%) were 2-5 months, 1,178 (15%) were 6-11 months and 55 (1%) were 12 months or older when the sample was collected (date of birth was missing for 91).

Age at sample collection	Tot. Results	Positives	
<2 months	**3,561**	**84**	*2.4%*
2-5 months	**2,754**	**132**	*4.8%*
6-11 months	**1,178**	**110**	*9.3%*
12 months +	**55**	**4**	*7.3%*

338 (4.4%) of the 7,639 results from MCH, MDH, KCH and QECH were positive. The age-specific number (%) of positive results is shown on the left. Receipt of the DNA-PCR result at the health facility is a prerequisite to updating of patient records and for appropriate clinical management. Considering the delays between sample collection and dispatch of the test result from the lab, the child's age at the time of dispatch of the result from the lab is a useful indicator for the process of early infant diagnosis

and early initiation of ART for confirmed infected infants. The table below shows the distribution of ages when results were dispatched from the lab.

Age when result disp. from lab	Tot. Results	*(Col %)*	Positives	*(Col %)*
<2 months	**1,204**	*16%*	**24**	*7%*
2-5 months	**4,821**	*63%*	**176**	*52%*
6-11 months	**1,420**	*19%*	**114**	*34%*
12 months +	**132**	*2%*	**19**	*6%*
(missing date)	**62**	*1%*	**5**	*1%*
Total	**7,639**	***100%***	**338**	***100%***

Out of 338 positive results dispatched from the 4 labs, only 24 (7%) were sent before the child was 2 months old. A total of 200 (59%) positive results were sent before the child was 6 months old and 314 (93%) were sent before the child was 12 months old. A total of 207 infants were started on ART in WHO stage 1 or 2 on the basis of confirmed HIV infection (see ART section below). This is equivalent to **66%** of the positive DNA-PCR results dispatched for children <12 months this quarter.

7 Blood Safety

The Malawi Blood Transfusion Service (MBTS) is striving to provide blood products for the entire country using voluntary non-remunerated donors and quality assured screening for transfusion transmissible infections (TTIs). However, for the last years, MBTS has not been able to meet the entire national demand and several hospitals continue to supplement or rely entirely on blood units collected from replacement donors. Complete reports from MBTS have been available throughout, but blood safety reports from health facilities have not been consistently available and it has been challenging to compile national reports relying on the data passively submitted by the sites. Therefore, the PMTCT/ART supervision teams were tasked with active collection of blood donor and cross-matching data from all visited health facilities. Data were collected from the blood donor and cross-matching registers in the hospital laboratories. Some of the visited laboratories were not using the standard MOH registers and the aggregation of data for reporting may have been affected by incomplete documentation at some sites.

A total of **13,299** blood units were collected in Malawi during Q3 2013. MBTS collected **8,698 (65%)** of these, all of which were screened comprehensively for the relevant TTIs (HIV, Hepatitis B, Hepatitis C, syphilis, malaria). In addition, **51** hospitals in Malawi collected a total of **4,601** units from replacement donors. **3,948 (86%)** of these units were screened for at least the 3 key TTIs (HIV, HepB and syphilis) and **862 (22%)** were also screened for HepC and malaria. This means that a total of **12,646 (95%)** of all units collected this quarter were screened at least for HIV, HepB and syphilis. Based on the blood donor registers at the sites that collected blood from replacement donors, 248 donated units were screened only for HIV and HepB; and 2 units were screened for HIV only. 403 were screened with any other combination of tests for TTIs.

A total of **6,738** potential replacement donors were documented in the blood donor registers at the facilities and 4,601 (68%) of these ended up donating. Facilities may have used different screening algorithms and potential donors may have been excluded on the basis of different criteria, including TTIs, blood group, haemoglobin concentration and/or clinical conditions. Testing for less prevalent TTs may have only been carried out for donors who passed the screening for more common conditions. In total, 81% of potential donors were tested for HIV, 80% for HepB, 80% for syphilis, 42% for malaria and 20% for HepC. Detailed data on individual test outcomes among all potential blood donors are presented in the Appendix.

8 Post Exposure Prophylaxis (PEP)

A total of **803** persons received PEP during Q3 2013. This is an increase from the previous quarter (704).

9 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 to women who received an injection of Depo-Provera in pre-ART and ART clinics during the last quarter. The report 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 2013 Q3.

	Pre-ART		ART		Both patient groups	
Zone	Tot. women	On Depo	Tot. women	On Depo	Tot. women	On Depo
NZ	1,162	**502** *43%*	25,512	**14,054** *55%*	26,674	**14,556** *55%*
CEZ	705	**94** *13%*	20,975	**3,646** *17%*	21,680	**3,740** *17%*
CWZ	3,162	**603** *19%*	53,241	**12,705** *24%*	56,404	**13,307** *24%*
SEZ	4,169	**1,208** *29%*	78,010	**23,729** *30%*	82,178	**24,937** *30%*
SWZ	6,203	**497** *8%*	88,726	**9,694** *11%*	94,928	**10,191** *11%*
Malawi	15,400	**2,903** *19%*	266,463	**63,828** *24%*	281,864	**66,730** *24%*

* 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 **66,730 (24%)** women received Depo-Provera from HIV clinics in Q3 2013. This is an increase from the previous quarter. The N Zone had achieved the highest coverage among women in pre-ART and ART. PIFP access continued to be affected by stock-outs of Depo-Provera, but patient coverage and stock availability had improved this quarter with 535 (79%) of ART/PMTCT sites having stocks of Depo-Provera in October 2013.[3] This was mainly due to inclusion of Depo-Provera in the quarterly distribution of ARVs and other HIV commodities.

10 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 **491,340 (85%)** of all patients in care were on CPT at the end of Q3 2013. This is a slight decrease in coverage from the previous quarter (89%), which was mainly caused by drug distribution challenges within Chiradzulu district.

[3] Many Mission hospitals do not provide family planning.

Table 4: Number and % of patients retained in HIV care who were on cotrimoxazole and isoniazid preventive therapy (CPT, IPT) by the end of 2013 Q3.

	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	6,455	**3,979** *62%*	3,876	**3,628** *94%*	45,328	**43,692** *96%*	55,659	**51,300** *92%*	3,876	**2,643** *68%*
CEZ	6,365	**3,109** *49%*	2,639	**2,555** *97%*	36,530	**33,501** *92%*	45,534	**39,166** *86%*	2,639	**1,590** *60%*
CWZ	13,992	**8,011** *57%*	9,329	**7,820** *84%*	92,737	**83,365** *90%*	116,058	**99,196** *85%*	9,329	**5,335** *57%*
SEZ	25,467	**14,541** *57%*	13,469	**13,136** *98%*	124,687	**121,881** *98%*	163,623	**149,558** *91%*	13,469	**6,063** *45%*
SWZ	25,617	**18,711** *73%*	17,106	**13,652** *80%*	152,698	**119,757** *78%*	195,421	**152,120** *78%*	17,106	**7,604** *44%*
Malawi	77,896	**48,353** *62%*	46,419	**40,791** *88%*	451,980	**402,196** *89%*	576,295	**491,340** *85%*	46,419	**23,234** *50%*

11 TB / HIV Interventions

11.1 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.

446,238 (99%) of all patients retained on ART were screened for TB at their last visit before end of September 2013. As of that visit, **1,775 (<1%)** patients were new TB suspects and had presumably been referred for examination by a clinician and for TB investigations. **1,654 (<1%)** patients had confirmed TB (clinical or lab based). Out of these, **1,376 (83%)** were confirmed to be on TB treatment and **278 (17%)** had not yet started or had interrupted TB treatment. An excerpt from the data in the **Annex** (*Cumulative ART outcomes*) is shown below.

Current TB status among ART patients (ICF)

ICF not done (Current TB status unknown/ not circ)	**5,742**	**1%**
ICF done	**446,238**	**99%**
TB not suspected	**442,809**	99%
TB suspected	**1,775**	0%
TB confirmed	**1,654**	0%
TB confirmed, not on treatment	**278**	17%
TB confirmed, on TB treatment	**1,376**	83%

11.2 Isoniazid Preventive Therapy (IPT)

All pre-ART patients with a negative screening outcome for TB symptoms are eligible for IPT. The first (large scale) distribution of isoniazid and pyridoxine for the HIV programs reached the sites during July 2012. **23,234 (50%)** of 46,419 patients retained in pre-ART were on IPT by the end of September 2013. Isoniazid was in stock at 339 facilities during the October 2013 supervision visit. IPT coverage is expected to increase further over the next quarters.

12 HIV-Related Diseases

Table 5 shows the number of patients treated for key HIV-related indicator diseases. **5,139** TB patients were started on TB treatment this quarter and HIV status was ascertained for **4,600 (90%)**. **2,580 (56%)** of these were HIV positive and **1,666 (65%)** of all HIV positives were already on ART when starting TB treatment.

The Diflucan (fluconazole) donation program has received renewed attention and significant stocks of fluconazole were distributed to all sites in November 2012. A modification of the reporting system led to data inconsistencies in Q4 2012. In Q3 2013, **502** and **827** patients received Diflucan for acute cryptococcal meningitis and oesophageal candidiasis, respectively. **430** patients with Kaposi sarcoma were registered for ART in this quarter.

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
2012 Q4	5,013	4,654 *93%*	2,540 *55%*	1,423 *56%*	428		
2013 Q1	4,765	3,972 *83%*	2,568 *65%*	1,487 *58%*	444	472	900
2013 Q2	4,806	4,317 *90%*	2,472 *57%*	1,718 *69%*	455	625	1,040
2013 Q3	5,139	4,600 *90%*	2,580 *56%*	1,666 *65%*	420	502	827

13 HIV-Exposed Child Follow-Up

13.1 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 / postnatal ward; 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 infection through DNA-PCR or 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 HIV uninfected by the age of 24 months.

13.2 HIV Exposed Child Registration Data

This is the 8th quarterly report from the standard follow-up program for HIV exposed children. **10,152** HIV exposed children were newly enrolled into follow-up during Q3 2013; **5,734 (56%)** of these were under the age of 2 months. This represents timely enrolment for **67%** of the 8,564 known HIV exposed children discharged from maternity this quarter. The total number of new enrolments (10,152) exceeds by 1,588 the total number of known HIV exposed children discharged from maternity (7,520). This apparent discrepancy may be explained by delayed enrolment of infants born in previous quarters; by double-counting of infants who transferred between sites; or by identification and enrolment of additional HIV exposed infants after birth. Overall, enrolment into follow-up for known HIV exposed infants appears to be almost complete.

The documentation of follow-up outcomes, particularly the updating of DNA-PCR results on patient cards, remained incomplete at several sites. This has led to an underreporting of ascertainment of HIV status among the 2 month old cohort.

13.3 Birth Cohort Outcomes

There were **6,863** infants in the **2 month age cohort**. **2,491 (36%)** had received a DNA-PCR result. 84 **(3%)** of these were confirmed HIV infected. An additional **29** infants were diagnosed with *presumed severe HIV disease,* which means that a total of **113** infants were eligible for ART. **57 (50%)** of these had started ART. The proportion of positives starting ART is lower compared to the previous quarter (67%). Out of the entire 2-month age cohort, **6,039 (89%)** were retained in exposed child follow-up, **57 (<1%)** had started ART and **52 (<1%)** were discharged confirmed uninfected[4]. **23 (<1%)** were known to have died and **630 (9%)** had been lost to follow-up.

There were **7,334** children in the **12 month age cohort**. Current HIV infection status was known for **2,098 (29%)** children (DNA-PCR or rapid antibody test) and **131 (6%)** of these were confirmed HIV infected. **11 (1%)** additional children had been diagnosed with *presumed severe HIV disease,* which means that a total of **142** children were eligible for ART. **150** had started ART (this exceeds the number of children eligible for ART is likely due to a data error). Out of the entire age cohort, **4,948 (69%)** were retained in exposed child follow-up, **150 (2%)** had started ART and **65 (1%)** were discharged confirmed uninfected[4]. **1,965 (27%)** were lost to follow-up and **51 (1%)** were known to have died (outcome data are incomplete for this cohort).

There were **4,397** children in the **24 month age cohort**. Current HIV infection status was known for **1,756 (40%)** children (DNA-PCR or rapid antibody test) and **167 (10%)** of these were confirmed HIV infected. **47** additional children had been diagnosed with *presumed severe HIV disease,* which means that a total of **214** children were eligible for ART. **176 (82%)** of these had started ART. Out of the entire age cohort, **764 (18%)** were retained in exposed child follow-up, **176 (4%)** had started ART and **1,359 (32%)** were discharged confirmed uninfected[4]. **1,915 (45%)** were lost to follow-up and **60 (1%)** were known to have died.

Confirmed HIV-free survival at age 24 months in this quarter was only **32%**, which was implausibly low and related to the fact that only 40% in this cohort had a known HIV status. 2,641 (60%) children were classified as '*current HIV infection status unknown'* and many of these may be among

[4] 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.

the 1,915 children lost to follow-up and the 60 children who had died. However, 764 (18%) were retained in follow-up beyond age 24 months and a final rapid test was not available for these children, possibly due to continued breast feeding. There are still problems with scheduled HIV testing (and documentation of test results) at 6 weeks, 12 and 24 months of age.

14 Pre-ART

14.1 Pre-ART Registration Data

A total of **8,884** patients were newly registered for pre-ART follow-up in Q3 2013. **768 (9%)** 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 **149,619**.

14.2 Cumulative Pre-ART Follow-up Outcomes

46,419 (31%) of all patients ever registered were retained in pre-ART follow-up by the end of September 2013; **63,915 (43%)** had started ART; **33,434 (22%)** had been lost to follow-up; **1,683 (1%)** were known to have died. The proportion of patients starting ART is bound to increase in the cumulative pre-ART cohort analysis over time. Based on a subtraction of cumulative outcomes from the previous quarter, **4,486** pre-ART patients started ART during Q3 2013, **4,644** were lost to follow-up and **63** died.

CPT coverage among pre-ART patients was **40,791 (88%)** in Q3 2013 while IPT coverage decreased from 58% to **23,234 (50%)**. **2,903 (19%)** of 15,400 women had received Depo-Provera from their pre-ART clinic. Further details on CPT, Depo-Provera and IPT are presented in **Tables 3 and 4** in the sections above.

15 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 ANC at the earliest opportunity to take home with instructions how to give it to the new-born.

15.1 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. **Maternal PMTCT coverage** is estimated from the number of pregnant women who were already on ART when getting pregnant (from maternity reports) ***plus*** those who newly started ART when pregnant (from ART reports): **Maternity reports** capture ART status at the time of delivery (up to the time of discharge from the postnatal ward). The timing of ART initiation is categorized into: (any time) before pregnancy; during 1st / 2nd trimester; during 3rd trimester; during labour. About 95% of pregnant women in Malawi attend ANC, but only 83% of women in the general

population deliver at a health facility in Malawi. Maternity reports therefore have the potential for undercounting the number of mothers and infants receiving ARVs. However, there is evidence from ANC and maternity reports that almost all of the known HIV infected women deliver at health facilities. ARV coverage among known positives is therefore reliably calculated from maternity reports. In contrast, **ART program reports** capture pregnancy (and breastfeeding) status at the time of *ART initiation*, providing information on the number of new women starting ART while pregnant (or while breastfeeding). ART reports do not capture women who became pregnant after starting ART. This is why both data sources have to be combined for the estimation of the total ART coverage among pregnant women.

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.

New standard M&E tools for ANC and maternity were implemented in Malawi in January 2010 and revised tools were distributed in Q2 2012 to reflect the Option B+ 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 (source: National HIV Prevalence and AIDS Estimates Report for 2010). There are an estimated 15,750 HIV infected pregnant women in the population per quarter (1/4 of 63,000 per annum).

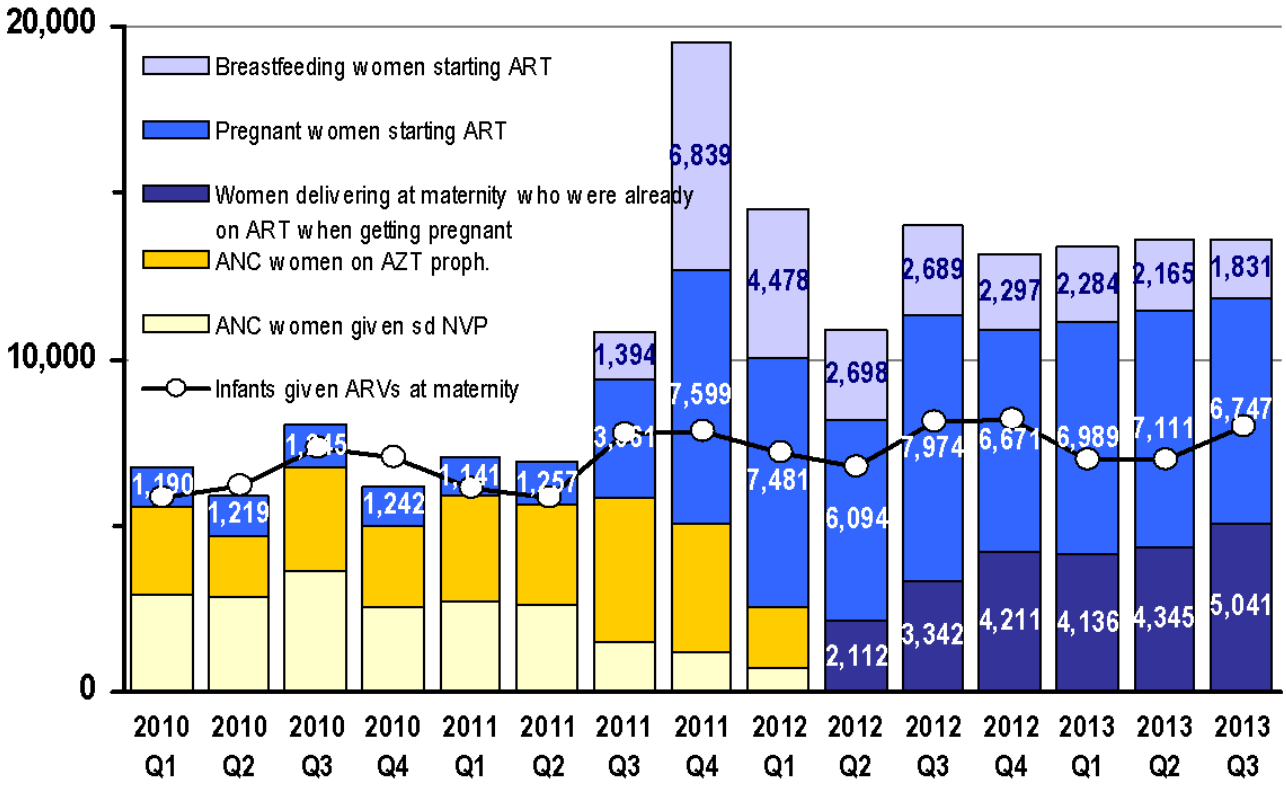
15.2 ARV Coverage among Pregnant / Breastfeeding Women and Exposed Infants

11,788 pregnant women were on ART in Q3 2013. This is based on the **5,041** women at maternity who were already on ART when getting pregnant (maternity report, see below) and the **6,747** women who newly initiated ART while pregnant (ART report, see below). An additional **1,831** breastfeeding women started ART due to ***Option B+*** (in WHO clinical stage 1 or 2), bringing the total number newly started on ART under *Option B+* to **8,578**. Most women starting ART while breastfeeding were probably identified late in maternity or early in the postnatal period, but this group may also include some women who re-initiated after interrupting ART in pregnancy. **7,941** infants were confirmed to have started NVP prophylaxis at maternity.

Figure 1 shows the transition from prophylactic ARV regimens for HIV infected mothers to universal ART under ***Option B+***. The (less effective) single dose NVP regimen and AZT combination prophylaxis had been phased out by April 2012. The average number of pregnant women starting ART each quarter **increased almost 6-fold** from **1,221** in the 12 month period before introduction of Option B+ to an average of **7,131** since Q4 2011. The **11,788** pregnant women on ART in Q3 2013 represent **75% coverage** of the estimated 15,750 HIV positive pregnant women in the population per quarter. This is a slight increase from the previous quarter, but ART coverage among pregnant women has remained slightly below target. This was mainly due to challenges with supply and stock management of HIV test kits, compounded by sub-optimal sensitivity of testing under field conditions at ANC.

Figure 1: Transition from prophylactic ARV regimens for PMTCT to Option B+ in Malawi

Women who moved to Option B+ from sdNVP / AZT were double counted between Q3 2011 - Q1 2012. It is likely that <12,000 total women were on ARVs during these quarters. Data on women already on ART when getting pregnant are only available from Q2 2012.



15.3 HIV Services at ANC

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

160, 355 women attended ANC for their first visit between July and September 2013. This exceeds the estimated 151,750 pregnant women in the Malawian population during one quarter.

The following report covers the outcomes of the **153,561** women who started ANC between January and March 2013 and who had finished ANC by September 2013. **14, 298 (9%)** of the women started ANC in their first trimester. **12, 274 (8%)** of the women were tested for syphilis at ANC and **1,069 (9%)** were syphilis positive. The low testing rate probably explains the higher (9%) than expected proportion (<1%) found positive as the testing was likely selective of those suspected to be positive. Only **35, 484 (22%)** of women in this cohort attended the minimum of 4 focussed ANC visits.

15.3.1 HIV Ascertainment at ANC

128, 022 (83%) of ANC attendees had their HIV status ascertained. This is an increase from the previous quarter (77%). Out of all women whose HIV status was ascertained, **7,945 (6%)** presented with a valid documented previous HIV test result and **120,077 (94%)** received a new HIV test result at ANC. A total of **9,988 (8%)** women were found HIV positive. This is lower than the estimated 11% HIV prevalence among pregnant women and this is likely due to problems with sensitivity of HIV rapid testing in high volume service settings.

15.4 ARV Coverage at ANC

8,908 (89%) of (known) HIV infected women attending ANC received ART. This represents **57%** coverage of the estimated 15,750 HIV positive pregnant women per quarter at the population level. ART coverage among pregnant women increased from the previous quarter. ART coverage at

ANC remains unsatisfactory mainly due to challenges with identification of HIV positives related to supply and stock management of HIV test kits, compounded by sub-optimal sensitivity of rapid HIV testing at ANC.

Of the **8,908** ANC women who were known to receive ART, **3,244 (36%)** were already on ART when starting ANC **4,227 (47%)** initiated before 28 weeks of pregnancy and **1,437 (16%)** initiated during the last trimester of pregnancy. Based on the ART report, about **765** additional pregnant women initiated ART this quarter and most of these are assumed to have started ART after their last ANC visit.

8,800 (88%) of HIV infected women at ANC were on Cotrimoxazole Preventive Therapy.

6,895 (69%) of HIV infected women attending ANC received the infant dose of ARVs (nevirapine syrup) to take home. This is an increase from the previous quarter (63%).

15.5 HIV Services at Maternity

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

Between July and September 2013, **125,100** women were admitted for delivery to maternity; **7,179** of these were referred to another facility before delivery, resulting in **132,279** total admissions to maternity during Q3 2013. Out of all admissions, **122,356 (96%)** delivered at health facilities, while **5,427 (4%)** had already delivered before reaching a facility. The **122,356** facility deliveries represent **81%** of the estimated 151,750 deliveries in the population which is slightly less than the 83% reported in the Integrated Household Survey Report of 2010-2011.

A total of **119,266 (95%)** deliveries were conducted by skilled birth attendants, **1,010 (1%)** by paramedical staff and **5,114 (4%)** were not attended by any of the above (probably mainly among women who delivered before reaching maternity). **15,947 (12%)** of women developed obstetric complications. The most common leading complications were obstructed / prolonged labour (**5,354** cases) and post-partum haemorrhage (**1,904** cases). A total of **127,783** babies were born, **122,857 (96%)** were singletons and **4,926 (4%)** were twins/multiples. There were **125,557 (98%)** live births and **2,226 (2%)** stillbirths. **124,301 (99%)** of babies born alive were discharged alive and **1,256 (1%)** died before discharge. **125,117 (>99%)** of women were discharged alive and **273 (<1%)** women died before discharge, which is equivalent to a maternal mortality ratio of **218 per 100,000** live births among women attending maternity.

15.5.1 HIV Ascertainment at Maternity

122,392 (92%) women had their HIV status ascertained at maternity. Out of these, **118,946 (97%)** presented with a valid previous HIV test result and **3,446 (3%)** received a new HIV test result. A total of **9,337 (8%)** women were HIV positive and **113,055 (92%)** were negative. The **122,392** women whose HIV status was ascertained at maternity represent **81%** of the expected 151,750 women delivering in the population.

HIV exposure status was ascertained for **115,841 (93%)** out of 124,301 babies born and discharged alive. **8,564 (7%)** of these were born to a known HIV positive mother.

15.5.2 ARV Coverage at Maternity

A total of **8,908 (95%)** of HIV infected women attending maternity received ART. This is a slight increase from the previous quarter (7,905). Out of these, **5,041 (57%)** had started ART before pregnancy, **1,764 (20%)** initiated ART during the 1st or 2nd trimester, **1,805 (20%)** initiated during the 3rd trimester and **298 (3%)** initiated ART at maternity.

A total of **7,941 (93%)** of infants who were known HIV exposed and discharged alive started daily NVP prophylaxis at maternity. This represents **50%** coverage of the estimated 15,750 HIV exposed infants born in the population in this quarter.

16 ART Access and Follow-Up Outcomes

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

16.1 New ART Registrations during Q3 2013

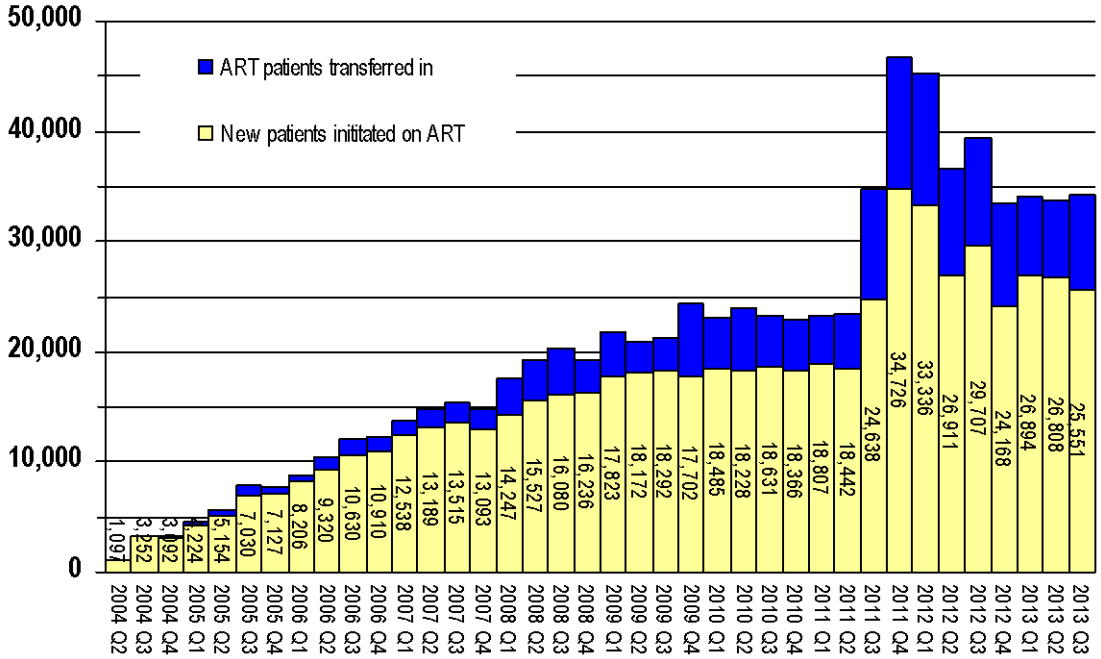
By the end of September 2013, there were **675 static ART sites** in Malawi, managed by government, mission, NGOs and the private sector. Out of these, **78** were ART facilities in the private sector, charging a nominal MK500 per monthly prescription of drugs per patient.

Implementation of the Malawi Integrated Clinical HIV Guidelines started in July 2011 and triggered a massive surge in new ART initiations (see **Figure 2**). In Q3 2013, **25,551** patients initiated ART and 8,258 patients were registered as a transfer in (already on treatment; 24% out of all 34,243 clinic registrations). These numbers are similar to the previous quarter.

Among all new registrations **34%** were males and **66%** females. **6,747 (30%)** of all females were pregnant and **6,429 (95%)** of these were started under ***Option B+*** in WHO stage 1 or 2, independent of their CD4 count. **318** 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. An additional **1,831** women in WHO stage 1 or 2 were started because of breastfeeding, bringing the total number of women started under ***Option B+*** [5] to **8,260**. The number of ART initiations in Q3 2013 remained slightly lower than projected, probably mainly due to challenges with HIV testing.

Figure 2: 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 **19,389 (57%)** of all patients started in WHO stage 1 or 2. **10,131 (52%)** of these started due to a CD4 count below 350. Access to scheduled CD4 count monitoring in pre-ART clinics remains limited and a total of 37,185 CD4 results were produced in Q3 2013. The roll-out of

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

scheduled CD4 count monitoring in the Pre-ART program is expected to increase the number of early ART initiations. **12,289 (36%)** of patients registered started in WHO stage 3 and **2,049 (6%)** started in stage 4.

2,801 children were registered for ART in Q3 2013. **539** of these were registered under the policy of universal ART for children aged 12-23 months in WHO stage 1 or 2, independent of CD4 count. This is a considerable increase from the previous quarter (279). **143** children started ART with presumed severe HIV disease, which was similar to the previous quarter (153). The number of infants in WHO stage 1 or 2 who started due to confirmed HIV infection through DNA-PCR increased from 158 in Q2 to **207** in Q3 2013. This number is equivalent to **52%** of the 338 positive DNA-PCR results dispatched from the labs this quarter. Early paediatric ART access has remained below expectations, but the relatively low number is consistent with reduced transmission rates due to Option B+: considering that 8,564 HIV exposed infants were identified at maternity and assuming a 2% transmission rate among the 95% of HIV positive mothers at maternity who received ART (and 20% transmission in the 5% who did not receive ART)[6], only about 283 of these known HIV exposed infants may have been infected perinatally during Q3 2013. The most significant bottleneck for early infant treatment remains the identification of HIV infected pregnant / breastfeeding women.

1,433 (5%) out of all ART clinic registrations were patients with TB: **907 (3%)** had a current and **526 (2%)** a recent history of TB. **420 (1%)** of patients registered had Kaposi's sarcoma.

16.2 Cumulative ART Registrations up to September 2013

By the end of September, there were a cumulative total of **793,286** clinic registrations, representing **641,158 (81%)** patients who newly initiated ART and **144,833 (18%)** patients who transferred between clinics. **7,295** (1%) out of all clinic registrations were patients who re-initiated ART after treatment interruption. Out of all registrations, **36**% were males and **64**% were females, **91**% were adults and **9**% were children (<15 years). Private sector clinics accounted for **24,811** (3.1%) of total patient registrations.

16.3 ART Outcomes

459,261 patients were alive on ART by the end of September 2013. This number includes **7,281** patients who were assumed to be 'in transit' as of the 30th September 2013, based on the difference between **152,114** patients *transferred out* and **144,833** 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 **641,158** patients ever initiated on ART, **459,261 (72%)** were retained alive on ART, **64,293 (10%)** were known to have died, 122,238 **(19%)** were lost to follow-up and **2,658** (<1%) were known to have stopped ART. An estimated **417,963** adults and **41,298** children (<15 years) were alive on ART by the end of September 2013**.**

[6] UNAIDS Reference Group on Estimates Modelling and Projections (2011). Working paper on mother-to-child-transmission rates for use in Spectrum. Geneva, UNAIDS.

Figure 3 Patients alive on ART at the end of each quarter in Malawi, stratified by size of facility (number of patients alive on ART)

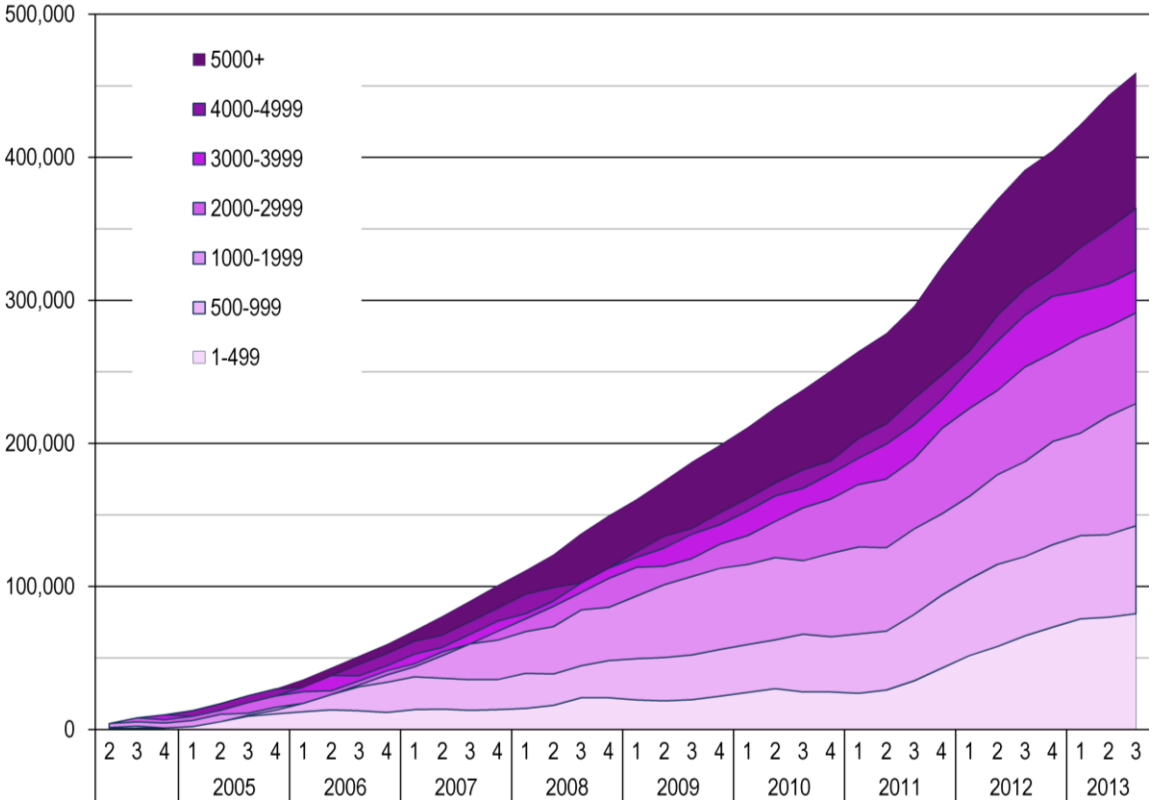


Figure 3 shows the increase of patients alive on ART by the end of each quarter. The number of patients alive on ART **increased by 16,040** in Q3 of 2013. The quarterly growth has slowed compared with the previous quarter (20,355). **Figure 3** also illustrates the ongoing decentralization of Malawi's ART program. From Q3 2011, the greatest increase in ART patient numbers was seen at sites with fewer than 500 patients alive on ART. By the end of September 2013, 50% of the national ART patient cohort was in care at sites with fewer than 2,000 patients.

Figure 4: 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)

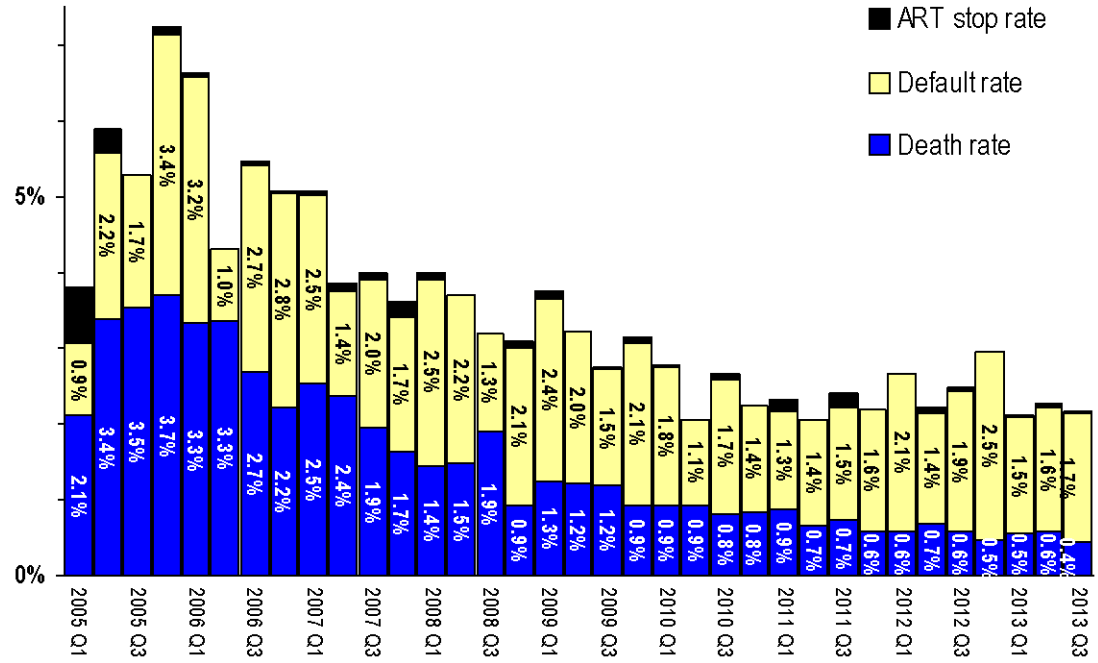


Figure 4 shows the considerable decrease of ART drop-out rates since the start of the national programme. There were **2,061** new deaths, **7,752** new defaulters, and **148** new ART stops in Q3 2013. This translates into a quarterly death rate of **0.4%** and a defaulter rate of **1.7%** among the patients alive and on treatment in this quarter. These rates were similar to the previous quarter. Based on previous operational studies, about half of the patients in stage 3 and 4 who are classified as lost to follow-up are thought to have died. There is also an indication that 5-10% of pregnant women who were registered as 'initiated on ART' under Option B+ may have never actually started taking ARVs due to inadequate preparation at ANC. Importantly, the ascertainment of loss to follow-up requires updating of patient treatment cards after analysis of the most recent dispensing visit. Any lack in rigour in this process will lead to a misclassification of patients who have been lost to follow-up as 'retained alive on ART'.

By end of September 2013, a cumulative **64,293 (10%)** patients were known to have died **122,238 (18%)** were lost to follow-up and **2,658** (**<1%**) were known to have **stopped ART.**

Figure 5: 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)

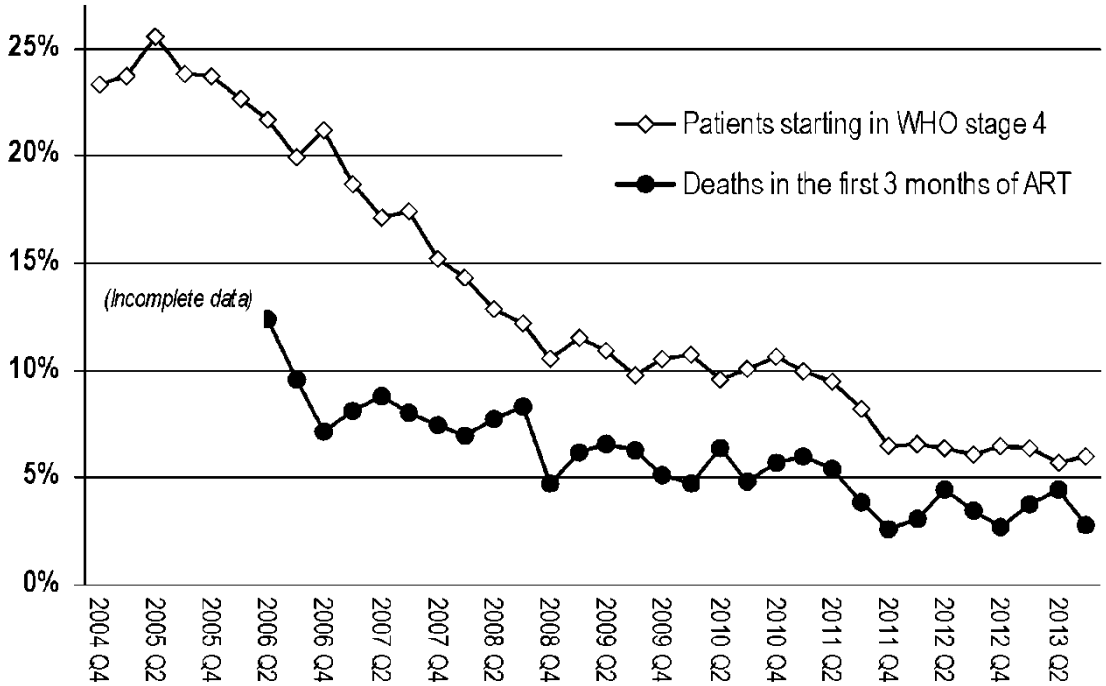


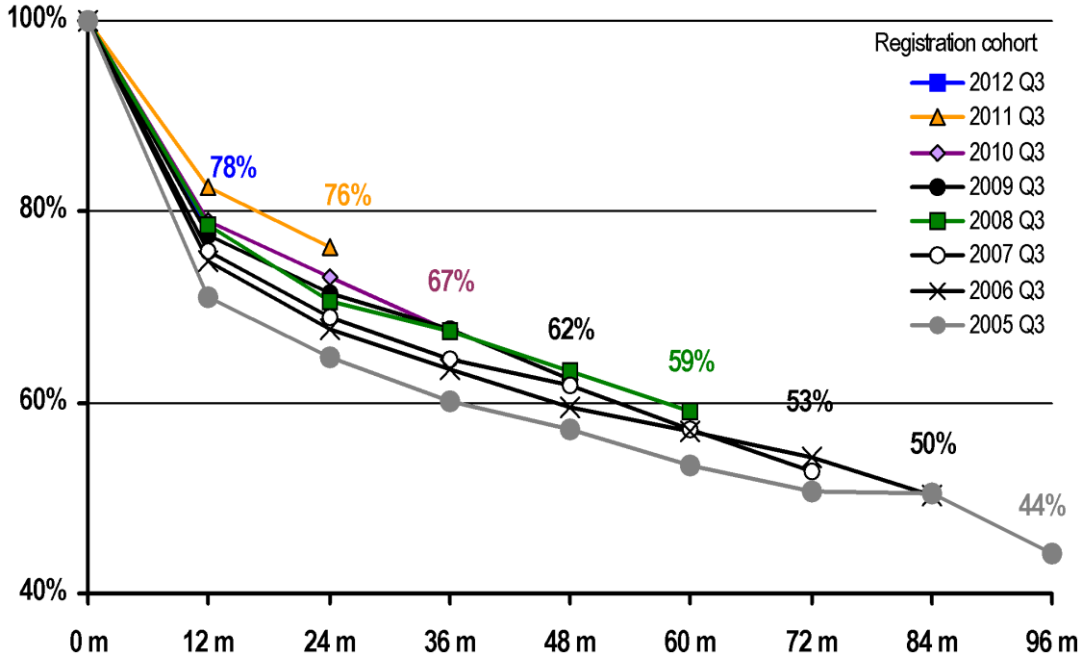
Figure 5 shows the considerable decline in **early mortality** since the start of the program. In Q2 of 2006 11% of new patients died within the first 3 months after ART initiation. There has been a remarkable decline in early mortality and the lowest point thus far was reached in Q4 2011. The decrease 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). It correlates well with the decline in the proportion of patients starting ART in WHO clinical stage 4 from 25% in 2005 Q2 to **6%** in Q3 2013. Slight fluctuations in the calculated early mortality rates are mainly due to inconsistent classification of month of death at the sites with electronic patient record systems. The 2011 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).

16.4 ART Cohort Survival Analysis

A 12, 24, 36, 48, 60, 72, 84 and 96-month **'cohort outcome survival analysis'** was conducted for patients registered in Q3 of 2005, 2006, 2007, 2008, 2009, 2010, 2011 and 2012, 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 2012. For the 6th time, a further subgroup analysis was done for women who started ART under ***Option B+*** during Q3 2012 and Q1 2013. **78% of adults** and **80% of children** were retained alive on ART after 12 months on treatment. This is a slight increase for children from the previous quarter, but remains close to the WHO target of 85%. **Figure 6** shows the continuous improvement of long-term treatment outcomes over time. **59%** and **44%** of patients registered 5 and 8 years ago had been retained alive on ART.

Figure 6: Group cohort survival analysis: Proportion of patients retained alive on ART 12, 24, 36, 48, 60, 72, 84 and 96 months after ART initiation



6-month group cohort survival outcomes were known for **8,220** (96%) of the 8,646 women registered as having started ART under *Option B+* in Q1 2013[7]. This number represents 543(7%) women who transferred out and are therefore double counted and **7,677 (93%)** patients not transferred. **6,057 (79%)** of these were retained at 6 months after registration. **1,546 (95%)** of those not retained were lost to follow-up, **24 (1%)** were known to have stopped ART and **50 (3%)** were known to have died.

12-month group cohort survival outcomes were known for **10,250** (94%) out of the 8,792 women registered as having started ART under *Option B+* in Q3 2012.[7] This number represents **1,045 (10%)** women who transferred out and are therefore double counted and **9,205 (90%)** patients not transferred. **6,630 (72%)** of these were retained at 12 months after registration. **2,350 (91%)** of those not retained were lost to follow-up, **49 (2%)** were known to have stopped ART and **176 (7%)** were known to have died.

The majority of women classified as lost to follow-up are likely to have stopped/ interrupted ART, but others are likely to have transferred to another facility without notifying the previous site and the actual proportion retained on ART may be higher than reported. The 6-month retention rate is the same as in the previous quarter. These are satisfactory results. Most of the women lost to follow-up failed to return after their first visit and many of these may have never actually started ART due to inadequate counselling and preparation in the initial phase of implementation. The program is examining the different modes of delivery closely to further improve uptake and retention on *Option B+*.

[7] Group cohort survival analyses were not available from some sites running electronic data systems.

6 month survival OptionB+

Survival and retention in ART program *

ART cohort registration group outcomes

Total ART clinic registrations	8,220	100%
Transfers out (double counted)	543	7%
Total not transferred out (patients in cohort)	7,677	93%
Total alive on ART	6,057	79%
Total not retained	1,620	21%
Defaulted	1,546	95%
Stopped ART	24	1%
Died	50	3%

12 month survival OptionB+

Survival and retention in ART program *

ART cohort registration group outcomes

Total ART clinic registrations	10,250	100%
Transfers out (double counted)	1,045	10%
Total not transferred out (patients in cohort)	9,205	90%
Total alive on ART	6,630	72%
Total not retained	2,575	28%
Defaulted	2,350	91%
Stopped ART	49	2%
Died	176	7%

16.4.1 Secondary outcomes of patients retained on ART

Secondary outcomes are known for the **443,221** patients alive on ART who remained at their sites at end of the quarter. They are assumed to be similar for the 8,111 patients *in transit*.

ART Regimens

448,286 (99%) of patients were on first line and **3,311 (1%)** were on second line regimens; **383 (<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, **23,325 (5%)** were on paediatric formulations and **22,202 (95%)** of these were on the new standard first line for children (regimen 2P: AZT/3TC/NVP).

By the end of September 2013, **309, 127 (73%)** of patients on adult first line were receiving regimen **5A** (tenofovir / lamivudine / efavirenz). **83,204 (20%)** were on regimen 1A (stavudine / lamivudine / nevirapine); **27,518 (6%)** were on regimen 2A (zidovudine / lamivudine / nevirapine), which was the main alternative regimen for patients with stavudine side-effects before transition to regimen 5A.

Adherence to ART

Pill counts and the number of missed doses were documented for **434,762 (96%)** out of all patients retained on ART and **390,005 (90%)** of these were classified as >95% adherent in Q3 2013. Manual estimation of adherence from pill counts is practically difficult and classification can be misleading. The ART program has switched to a direct evaluation of doses missed in 2010 to improve on accuracy of adherence assessment and plausible adherence levels are recorded with this method. However, there have also been persistent challenges with the analysis of adherence levels at sites with Electronic Data Systems (EDS) and adherence data from several of these sites could not be included in this report.

ART Side Effects

412,394 (91%) patients on ART had information on drug side effects documented at their last clinic visit before end of September 2013. **10,210 (2%)** of these had side-effects. This is a considerable decrease from 7% in the previous quarter following the full transition to regimen 5A (tenofovir / lamivudine / efavirenz) that started in July 2013.

17 TB / HIV Management

TB program data could not be reconciled with the National TB Control Program this quarter and ART treatment coverage among HIV infected TB patients could therefore not be estimated.

18 STI Treatment

STI reports were actively collected during the Integrated HIV Program Supervision exercise for the second time this quarter. This decision was taken due to the persistent challenges with 'passive' reporting based on data aggregated by the district STI coordinators. The supervision teams noted that about one quarter of facilities did not use the STI register (or used it inconsistently), so the data presented in this report are thought to represent about 75% of STI clients treated. The supervision teams re-emphasized the importance of complete and accurate documentation at the sites and the data quality is expected to improve with resumption of regular site supervision for the STI program. The complete set of STI program data collected is included in the Appendix.

18.1 Access to STI treatment and coverage

Based on the data collected at the facilities, a total of **45,948** STI cases were treated in Q3 2013. Considering the 75% completeness of reporting, this number is estimated to represent a total of **61,264** STI cases treated. This is equivalent to **62% STI treatment coverage** of the expected 98,600 STI cases in the population.

Out of **45,948** documented clients treated, **18,851** (41%) were male and **27097** (59%) were female. 3,314 (12%) of female STI clients were pregnant. **31,744** clients (69%) were 25 years and above, **10,473** (23%) were 20-24 years and **3,731** (8%) were under 20 years old.

18.2 Client Type and STI History

40,587 (88%) of clients were symptomatic and **5,361** (12%) were asymptomatic (treated as partners). Among symptomatic clients, **36,811** (91%) of were index cases and 3,776 (9%) were partners. A total of **12,737** partner notification slips were issued, equivalent to an average of 0.35 slips per index case. Considering the 12,737 partner notification slips issued, **72%** (9, 137) of those notified presented to the clinic. **33,958** (74%) of clients presented with their first lifetime episode of STI, **8,171** (18%) clients reported to have had an STI in over three months ago and **3,819** (8%) 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.

18.3 HIV Status

HIV status was ascertained for **20,548** (45%) clients and **7,081** (34%) of these were HIV positive. **1,331** (19%) of positives were identified through a new test initiated at the STI clinic, while **5,750** (81%) presented with a documented previous positive HIV test result. **3,797** (66%) of clients with a previous positive HIV test result were on ART.

The rate of HIV status ascertainment at STI clinics remained low. 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.

18.4 STI Syndromes

The most common syndrome was abnormal vaginal discharge (AVD) with **13,674** (28%) cases, followed by urethral discharge (UD, **11,455** cases) and genital ulcers (GUD, **8,273** cases). Similar to previous reports, balanitis, bubo, warts and neonatal conjunctivitis each accounted for 1 – 3% of cases.

18.5 Referrals

Given the high risk of recent HIV infection among STI clients, all clients with unknown status and those with a new negative test result should be referred for (repeat) HIV testing and counselling. Only **11,150** (29%) of the 38,867 STI clients with unknown or new negative test result were referred for repeat HTC. **651** (49%) of 1,331 clients who were newly tested HIV positive were referred for ART eligibility assessment.

19 Supply of HIV Program Commodities

19.1 Quantification and Procurement Planning

The Department for HIV and AIDS conducted a quantification and procurement planning review for HIV commodities in Q3 2013 which formed the basis for orders submitted to the Global Fund. Two highlights for the review were the realization of successful transition for over 73% patients from the stavudine based adult first line regimen to tenofovir based regimen with adequate supplies for the next 2 quarters. The second was availability of Co-trimoxazole 960mg for 6 months in the country hence an opportunity to increase CPT coverage.

All procurement of HIV commodities were conducted by the Partnership for Supply Chain Management through the Voluntary Pooled Procurement mechanism under the Global Fund. During Q3 2013, ARV and medicines for opportunistic infections worth $11.75 million were received by the Central Medical Store Trust warehouse dedicated for HIV Program commodities. This comprised of Tenofovir/Lamivudine/Efavirenz 300/300/600mg (Regimen 5A; 91% of the value of adult ARVs) and medicines for opportunistic infections (3% of the value for medicines for Opportunistic Infections). By end of Q3 2013, the program had received a total of 2,633,664 packs of Tenofovir/Lamivudine/Efavirenz 300/300/600mg (**8.5 months of stock)**.

To maintain adequate stocks in the pipeline and hence ensure uninterrupted supply for subsequent orders, additional orders estimated at over USD51 million were confirmed in Q3 2013 and are awaiting disbursement of funds by the Global Funds following submission of an approved PSM plan by the PR. These will be delivered in Q3; Q4 2014 as staggered shipments in time to facilitate a seamless transition from SSF grant period to the New Funding Model.

19.2 Quarterly distribution of HIV Commodities

The scheduled quarterly distribution of HIV commodities (DR 14) was carried out between 5th August and 6th September 2013. A total of different 47 HIV commodities were distributed to 658 sites, including ARVs, OI, STI medicines and laboratory commodities. Both Determine and Unigold HIV test kits were also distributed to individual health facilities to enable the health facilities provide uninterrupted testing services.

During Q3 2013, the logistics team at the Department of HIV and AIDS also coordinated a total of 1,572 individual commodity transactions between ART sites to avert stock outs and or prevent expiry for stocks that could not be utilized at selected health facilities. The above transactions are all managed using the HIV Department Supply Chain Hot Line, a toll free facility that was set up to strengthen communication between the health facilities and the central level. Health facilities providers are able to communicate supply chain and other drug related issues that need to be resolved by the technical team at the department.

19.3 Quarterly logistics monitoring and supply chain Trail for Q3 2013

The Logistics Team also conducted a monitoring exercise following distribution cycle 14 and supply chain trail for HIV commodities at 26 ART sites in Q3 2013 with the aim of strengthening in-country logistics co-ordination activities pertaining storage, stock management, distribution planning and distribution of HIV commodities to all ART health facilities. No deviations were noted from the verified delivery notes reviewed by the team and health facility staff during the supply chain trail visit. By end of Q3 2013, the logistics team had conducted on job training and mentoring at over 97 health facilities.

Some of the challenges noted during the Q3 2013 logistics monitoring visits include; Stock imbalances, under reporting of test statistics, inadequate documentation of consumption records in the daily activity registers, stock cards not being updated real time and lack of stock assessment skills.

The team conducted on job training in best practices of stock management and also conducted relocation of overstocked products between sites to minimize expires. The findings of the last three exercises at over 97 health facilities have significantly influenced the logistics strategies that have been adopted to strengthen logistics management of ARVs and medicines for opportunistic infections such as distribution of RDT daily activity registers and relocation books for registration of redistributed commodities to health facilities for which authorization codes must be obtained as a commodity tracking measure.

19.4 National Stock Status of HIV Commodities

Physical stock counts for ARVs and other medicines for HIV-related diseases were performed at all sites during the supervision visits in October 2013. **Table 6** shows the total commodity stocks found at the sites and in the warehouse and the estimated consumption periods. Following the quarterly distribution cycle 14 and maintaining a 2-month minimum stock level at the sites, stocks of the main adult and pediatric regimens were estimated to last until end of February 2014.

According to the physical stock count, **482** facilities were reported to have stocks of Determine HIV tests, totalling to **219,458** tests. This is equivalent to **1.6** MOS based on the reported HIV tests conducted in Q3 2013. An additional **1,032,200** tests were available in the warehouse (**7.4** MOS). However it has been observed that HIV test kits that are kept at various testing locations at the health facilities and in the laboratory may not be included in the physical stock count. Lack /and delayed communication of special testing events such as HTC services being offered during campaigns such as VMMC campaigns contributed to test kits shortages in some districts.

Minimum stocks of AZT/3TC 300/150mg are maintained at all sites for post-exposure prophylaxis (PEP) and the total stocks at the sites therefore far exceeds the actual consumption from patients using this regimen in alternative ART regimens or as PEP.

309,127 patients were on Regimen 5A, which was 81,858 (20.9%) less than projected in the procurement plan for the end of this quarter (390,979). This is attributed to a delayed transition in some of the big health facilities such as Chiradzulu District where the full transition to 5A is scheduled to commence in Q4 2013 and hence the 5A patient population is expected to increase by over 15%.The national ART program forecast and quantification was updated in July 2013, based on the last 7 quarters of new program data since implementation of the July 2011 guidelines.

Table 6: Total stocks of HIV program commodities at all sites visited during the 2013 Q3 supportive site supervision. Stock positions are from the date of the visit (between 1-4 weeks after the end of the quarter). Warehouse stock positions are from 14/10/2013

Inventory unit	Item	Sites with any Stock	Total Physical Stock		Consump-tion/ Month	Months of Stock *	
			At Sites	In Warehouse		At Sites	Wareh.
tins	ABC / 3TC 60 / 30mg tins (60 tabs)	**40**	**3,376**	**8,406**	1,125	3.0	7.5
	ATV / r 300 / 100mg tins (30 tabs)	**105**	**8,373**	**53,638**	2,936	2.9	18.3
	AZT / 3TC / NVP 300 / 150 / 200mg tins (60 tabs)	**574**	**87,431**	**9,320**	27,518	3.2	0.3
	AZT / 3TC / NVP 60 / 30 / 50mg tins (60 tabs)	**600**	**262,166**	**200,000**	55,505	4.7	3.6
	AZT / 3TC 300 / 150mg tins (60 tabs)	**564**	**14,821**	**4,075**	1,444	10.3	2.8
	AZT / 3TC 60 / 30mg tins (60 tabs)	**541**	**14,348**	**13,326**	1,902	7.5	7.0
	d4T / 3TC / NVP 30 / 150 / 200mg tins (60 tabs)	**287**	**60,430**	**33,944**	83,204	0.7	0.4
	d4T / 3TC / NVP 6 / 30 / 50mg tins (60 tabs)	**248**	**20,678**	**4,500**	1,775	11.6	2.5
	d4T / 3TC 30 / 150mg tins (60 tabs)	**474**	**26,708**	**962**	2,725	9.8	0.4
	d4T / 3TC 6 / 30mg tins (60 tabs)	**275**	**4,437**	**5,146**	381	11.6	13.5
	EFV 200mg tins (90 tabs)	**89**	**2,035**	**350**	150	13.5	2.3
	EFV 600mg tins (30 tabs)	**358**	**5,427**		3,547	1.5	
	LPV / r 100 / 25mg tins (60 tabs)	**38**	**1,568**	**11,552**	1,125	1.4	10.3
	LPV / r 200 / 50mg tins (120 tabs)	**32**	**490**	**166**	2,936	0.2	0.1
	NVP 200mg tins (60 tabs)	**454**	**12,630**	**6,705**	1,565	8.1	4.3
	TDF / 3TC / EFV 300 / 300 / 600mg tins (30 tabs)	**662**	**1,386,505**	**1,247,159**	309,127	4.5	4.0
	TDF / 3TC 300 / 300mg tins (30 tabs)	**178**	**9,308**	**1,391**	4,144	2.2	0.3
bottles	Fluconazole (Diflucan) 50mg / 5ml bottles (35 ml)	**36**	**908**		30	30.6	
	Gentian violet 25g bottles (1 each)	**547**	**6,760**	**6,794**	976	6.9	7.0
	NVP 10mg/ml bottles (25 ml)	**390**	**52,117**	**54,494**	15,485	3.4	3.5
vials	Benzathine Penicillin 1.44g vials (50 each)	**558**	**213,063**	**84,450**	31,435	6.8	2.7
	Bleomycine 15,000IU vials (1 each)	**19**	**1,353**				
	Ceftriaxone 1g vials (50 each)	**537**	**88,017**		84,849	1.0	
	Depo-Provera 150mg/1ml vials (25 each)	**535**	**1,900,904**	**397,950**	283,475	6.7	1.4
	Gentamicin 80mg / 2ml vials (50 each)	**626**	**926,360**		79,847	11.6	
	Vincristine 1mg / 1ml vials (1 each)	**54**	**17,204**		5,040	3.4	
tabs	Aciclovir 200mg blist packs (25 tabs)	**540**	**3,591,410**	**3,804,725**	511,469	7.0	7.4
	Aciclovir 400mg blist packs (500 tabs)	**101**	**860,120**	**1,481,500**	511,469	1.7	2.9
	Amitriptylline 25mg tins (500 tabs)	**284**	**803,168**	**354,500**	306,300	2.6	1.2
	Azithromycin 500mg blist packs (3 tabs)	**380**	**46,649**	**1,683**	8,441	5.5	0.2
	Ciprofloxacin 500mg blist packs (100 tabs)	**266**	**1,317,431**		241,933	5.4	
	Clotrimazole 500mg boxes (1 each)	**577**	**165,795**	**4,990**	31,098	5.3	0.2
	Codeine 30mg tins (100 tabs)	**49**	**319,841**	**230,000**	40,041	8.0	5.7
	Cotrimoxazole 100 / 20mg blist packs (1000 tabs)	**551**	**11,090,067**	**50,862,000**	3,937,364	2.8	12.9
	Cotrimoxazole 400 / 80mg blist packs (60 tabs)	**200**	**8,211,721**		29,305,861	0.3	
	Cotrimoxazole 400 / 80mg tins (1000 tabs)	**467**	**30,417,454**	**45,207,000**	13,413,185	2.3	3.4
	Cotrimoxazole 960mg blist packs (1000 tabs)	**586**	**29,832,261**	**54,404,000**	14,652,930	2.0	3.7
	Doxycycline 100mg tins (1000 tabs)	**554**	**27,523,846**	**3,780,000**	3,584,694	7.7	1.1
	Erythromycin 250mg tins (1000 tabs)	**592**	**14,440,010**	**76,000**	3,206,872	4.5	0.0
	Fluconazole (Diflucan) 200mg tins (28 tabs)	**513**	**374,940**	**4,508**	44,851	8.4	0.1
	Fluconazole (generic) 200mg tins (100 tabs)	**45**	**92,802**	**90,500**			
	Ibuprofen 200mg tins (100 tabs)	**290**	**1,142,299**	**430,200**	685,637	1.7	0.6
	Isoniazid 100mg blist packs (100 tabs)	**218**	**199,946**				
	Isoniazid 300mg tins (1000 tabs)	**339**	**2,388,793**	**5,859,000**	1,239,387	1.9	4.7
	Metronidazole 200mg tins (1000 tabs)	**568**	**14,167,442**	**949,000**	3,894,141	3.6	0.2
	Morphine 10mg blist packs (60 tabs)	**30**	**88,437**	**71,400**	174,725	0.5	0.4
	Pyridoxine 25mg tins (100 tabs)	**142**	**378,762**		1,322,942	0.3	
	Pyridoxine 50mg tins (1000 tabs)	**168**	**989,018**	**1,011,000**	1,322,942	0.7	0.8
tests	DBS kit (filter paper, lancet, etc.) bundles (20 eac	**360**	**69,272**				
	Determine HIV1/2 boxes (100 each)	**482**	**219,458**	**1,032,200**	139,425	1.6	7.4
	Determine syphilis boxes (100 each)	**47**	**57,377**		51,136	1.1	
	Uni-Gold HIV1/2 boxes (20 each)	**497**	**75,523**	**123,300**	14,507	5.2	8.5
pieces	Condoms female boxes (1 each)	**361**	**923,557**		150,147	6.2	
	Condoms male boxes (1 each)	**434**	**5,043,611**		3,721,510	1.4	

* 'Consumption per month' and 'Months of stock' for ARVs, CPT, INH and HIV test kits are based on the respective 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. Facility stock positions for OI and STI drugs include HIV Program and other supply sources. Total national consumption and MoS estimates are used for these commodity groups. '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.

20 Training and Mentoring

20.1 HIV Testing and Counselling, Early Infant Diagnosis

1,243 participants were trained in the 2013 HTC Skills Intensive Training this quarter, bringing the total number re-trained to **3,844.** A team of HTC master trainers and officers from the HIV Department monitored and supervised the intensive skills trainings in all the districts.

423 facilities in all districts received supportive supervision for HTC during this quarter.

20.2 PMTCT/ART

162 medical staff were newly trained and certified in PMTCT/ART this quarter. This brings the total number trained in the 2011 guidelines to **5,985**.

240 participants from the Central West Zone attended a Clinical Review Meeting for the HIV Programs (funded by I-TECH Malawi, Lighthouse Trust). Some of the challenges identified during this review include:

- Confusion among HTC Providers regarding the role of the *HTC Skills Intensive* trainings. Several sites reported disruption of PITC services for pregnant women because counsellors who had failed the re-training certification were barred from practising. There was also an erroneous perception that counsellors may only test a maximum of 8 PITC clients per day, which has led to ANC women being turned away without testing at some sites.

- Providers are missing the scheduled tests for exposed children at both 12 and 24 months.

- Linking of DNA PCR results to care. Facility staff logs the results without linking the results to the patient card (pink card).

Staff developed action plans to address the challenges and progress will be reviewed in next quarter meeting.

143 participants from 3 zones participated in the elimination of mother to child transmission (EMTCT) zonal meetings. **36** participated in the central east meeting, **54** participated in south east meeting and **53** participated in the south west. Participants included ART/PMTCT coordinators, HTC coordinators, FP coordinators and HMIS coordinators.

20.3 Viral Load Orientation Meeting

120 health workers received a one-day orientation in VL monitoring using capillary DBS sampling technique in **3** meetings (Mzuzu, Blantyre, Lilongwe). The orientation was supported by Howard University Technical Assistance Program (HUTAP), PIH, LCC, DREAM and the Department for HIV and AIDS.

20.4 HIV Clinical Mentoring Program

All districts have started implementing clinical mentoring activities. This was primarily due to availability of funding from CDC/PEPFAR, CHAI and other development partners. **921** providers from **235** facilities were mentored in the quarter. **250** were in intensive phase, **350** continuation phase and the remaining **104** graduated. Mentoring activities are supported by several implementing partners. The mentoring program has experienced are several challenges:

- Almost half of the 360 originally trained mentors have left MOH services and this has seriously weakened the mentoring capacity in most districts.
- The continuous high work load and low staffing levels at facilities make it very difficult to deliver clinical mentoring.
- High staff turn-over often leads to facilities losing all of their mentored staff, requiring resumption of intensive phase mentoring at the same facility for replacement staff.

21 Participants in Q1 2013 Supervision (Site visits 7 – 25 October 2013)

Richard Abuduo (CO, MOH)
Wilson Bett (CO, CHAM)
Annie Biza (Nurse, MDF)
Chris Blair (MO, EQUIP)
Lincy Chalunda (CO, MOH)
Ronard Chawinga (nurse, MOH)
Janet Chikonda (Nurse, MOH)
John Chipeta (M&E TA, Dept for HIV and AIDS)
Zengani Chirwa (TA, MOH, Department of HIV and AIDS)
Stephen Chu (HIV Zonal Supervisor, MOH, UNV)
Stuart Chuka (CO, MBCA)
Peter Donda (CO, Dedza DH)
Michael Eliya (PMTCT Program Officer, MOH)
Suleiman Ibrahim (HIV Supervisor, Central West Zone Office)
Andreas Jahn (M&E TA, MOH, Dept for HIV and AIDS)
John Kabichi (CO, MOH)
Lilian Kachali (Nurse, MOH)
Limbani Kadzuwa (Nurse, MOH)
Eviness Kafumbi Nkhoma (Nurse, MOH)
Vera Kajawo (Nurse, MOH)
Mathilda Kamanga (Nurse, Army)
Peter Kamanga (CO, EQUIP)
Oscar Kasiyamphanje (Nurse, CHAM)
Joseph Kasola (CO, MOH, Chitipa DH)
Catherine Kassam (, MOH)
Martin Katanga (CO, MOH)
Rodrick Kaulele (CO, CHAM (Sister Tereza))
Absalom Kaunda (CO, MOH, Mzimba DHO)
Jean Kayamba (Nurse, MOH)
Chiulemu Kusseni (CO, Partners in Hope)
Prospere Lutala (HIV Zonal Supervisor, MOH, UNV)
Mpatsu Magwaye (CO, Mulibwanji)
Ezra Majoni (Nurse, MOH)
Simon Makombe (ART officer, MOH, Dept for HIV and AIDS)
Amos Makwaya (CO, MOH)
Roseby Malombe (Nurse, CHAM)
Beatrice Malonje (Nurse, MOH)
Lameck Manda (Logistics Officer, MOH)
Davie Maseko (CO, SOS)
Rose Maviko (Nurse, Limbe HC)
Benjamin Mazalo (CO, SUCOMA Clinic)
Irvin Mchacha (CO, Dignitas)
Andrew Mganga (M&E Fellow, Dept for HIV and AIDS)
Erik Mittochi (CO (ART coord), MOH)
Chimwemwe Mkandawire (IT Fellow, Dept for HIV and AIDS)
Everista Mkandawire (Nurse, MOH)
Pax Mkupani (Logistics Fellow, MOH, Dept for HIV and AIDS)
Christopher Mkwezalamba (CO, MOH)
Offrey Mnduwira (CO, Police)
Damison Msiska (CO, Dwangwa)
Moreen Mtambo (PMTCT, MOH)
Andraida Mtoseni (Nurse, MOH)
Ekwala Mubiala (HIV Zonal Supervisor, MOH, UNV)
Ruockia Mwachumu (Nurse, MOH Nsanje DHO)
Musaku Mwenechanya (CO, EGPAF)
Austins Namondwe (CO, CHAM)
Mapay Ngalala (HIV Zonal Supervisor, MOH, UNV)
Stanley Ngoma (CO, MOH)
Joseph Njala (Program Officer, MOH, Dept for HIV and AIDS)
Grace Juma Nkhata (Nurse, MOH)
Angela Nkhoma (Nurse, MOH)
Mourine Gumbo Ntambo (Nurse, MOH)
Judith Ntopa (Nurse, Army)
Mike Nyirenda (CO, Lighthouse)
Sabina Phiri (Nurse, MOH)
Macleod Piringu (ART CORDINATOR, MOH)
Monica Simfukwe (Nurse, MOH, Chintheche RH)
Juliana Soko (ARV nurse, MOH, Livingstonia MH)
Elizabeth Tamula (Nurse, Baylor)
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Joseph Njala (Clin. HIV Fellow, Dept. for HIV and AIDS)

We thank all facility staff for their sincere welcome and co-operation with the HIV Department and its partners during these supportive visits. We congratulate all staff for their excellent work.

6th January 2014

22 Appendix (Full National HIV Program Data)

2013 Q3 HTC Report

			National coverage	
			Population denominator	
Total Number of Clients	**405,278**		3,772,503	**11%**
Gender and Pregnancy				
Males	139,412	34%	1,891,196	**7%**
Females	265,866	66%	1,881,306	**14%**
Females Non Pregnant	127,215	48%	1,274,306	**10%**
Females Pregnant	138,651	52%	151,750	**91%**
Age				
25 years and above	221,378	55%	1,256,106	**18%**
15 - 24 years	153,355	38%	789,500	**19%**
Children Below 15	30,545	8%	872,055	**4%**
18months - 14 years	28,416	93%	41,215	**69%**
Below 18months	2,129	7%	830,840	**0%**
HIV Test History				
Previously tested	259,706	64%		
Never tested before	145,572	36%		
Number of people ever tested since 2007	4,831,242			
Counselling Type				
Counseled with partner	94,182	23%		
Counseled alone	311,096	77%		
HIV Test Resuts				
Single test negative	361,498	89%		
First and second test negative	5,473	1%		
First and second test positive	36,437	9%		
First and second test discordant	1,870	0%		
Final Result				
No of children <18months with antibody positive	844	0.2%		
Positive	36,807	9.1%		
Negative	366,404	90.4%		
Inconclusive	1,223	0.3%		

Blood safety

Malawi (national)

2013 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Infect. disease screening among potential donors *

HIV screening

HIV testing not done	1,303	19%
Tested for HIV	5,435	81%
HIV negative	5,056	93%
HIV positive	379	7%

Hepatitis B screening

HepB testing not done	1,368	20%
Tested for Hepatitis B	5,370	80%
HepB Negative	5,081	95%
HepB Positive	289	5%

Hepatitis C screening

HepC testing not done	5,393	80%
Tested for Hepatitis C	1,345	20%
HepC Negative	1,315	98%
HepC Positive	30	2%

Syphilis screening

Syphilis testing not done	1,373	20%
Tested for Syphilis	5,365	80%
Syphilis Negative	5,196	97%
Syphilis Positive	169	3%

Malaria screening

Malaria testing not done	3,887	58%
Tested for malaria	2,851	42%
Malaria Negative	2,674	94%
Malaria Positive	177	6%

Summary screening outcome

Not donated	2,137	32%
Donated	4,601	68%
Screened for at least HIV, HepB and syphilis	3,948	86%
Screened for HIV, HepB, HepC, Syphilis, Malaria	862	22%
Screened for HIV, HepB, Syphilis	3,086	78%
Screened for HIV, HepB	248	5%
Screened for HIV only	2	0%
Screened with any other combination of tests	403	9%

Cross-matching report *

Blood group typing (for units and patients)

Total blood group typing done	18,476	100%

Blood units cross-matched (by source)

Total blood units cross-matched	11,487	100%
Total units from MBTS (estimated)	6,886	60%
Total units from replacement donors	4,601	40%

Blood units cross-matched by patient group

Units cross-matched for maternity	2,274	20%
Units cross-matched for paediatrics	2,706	24%
Units cross-matched for other ward	6,507	57%

* Subgroups may not add to 100% due to rounding

Cross-matching report

*

Transfusion reactions

Units transfused without adverse events	11,466	100%
Units with suspected transfusion reactions	21	0%
Units with confirmed transfusion reactions	0	0%

HIV Care Clinic (HCC) cohort analysis

Malawi (national)

2013 Q3 (Quarter)

Registration details

*

HCC clinic registrations

Total HCC registrations	19,142	100%

Registration type

Patients enrolled first time	17,983	94%
Patients re-enrolled	95	0%
Patients transferred in	1,064	6%

Sex

Males (all ages)	8,707	45%
Females (all ages)	10,435	55%
Non-pregnant	10,410	100%
Pregnant	25	0%

Age at registration

Adults 15+ yrs	8,222	43%
Children 0-14 yrs	10,920	57%
Children 24 months - 14 years	768	7%
Children below 24 months (exposed children)	10,152	93%
Children 2 - below 24 months	4,418	44%
Infants below 2 months	5,734	56%

Reason for HCC registration

Exposed infants	10,258	54%
Confirmed infected patients (pre-ART)	8,884	46%

* Subgroups may not add to 100% due to rounding

HIV Care Clinic (HCC) cohort analysis

Malawi (national)

2013 Q3 (Cumulative)

Registration details *

HCC clinic registrations

Total HCC registrations	239,721	100%

Registration type

Patients enrolled first time	231,507	97%
Patients re-enrolled	729	0%
Patients transferred in	7,485	3%

Sex

Males (all ages)	98,139	41%
Females (all ages)	141,582	59%
Non-pregnant	136,652	97%
Pregnant	4,930	3%

Age at registration

Adults 15+ yrs	136,288	57%
Children 0-14 yrs	103,433	43%
Children 24 months - 14 years	12,660	12%
Children below 24 months (exposed children)	90,773	88%
Children 2 - below 24 months	50,451	56%
Infants below 2 months	40,322	44%

Reason for HCC registration

Exposed infants	90,102	38%
Confirmed infected patients (pre-ART)	149,619	62%

Pre-ART follow-up outcome *

Primary follow-up outcomes

Total retained in pre-ART	46,419	32%
Started ART	63,915	44%
Defaulted	33,434	23%
Died	1,683	1%

Transfers between sites

Total not transferred out	145,451	97%
Transferred out	4,168	3%

* Subgroups may not add to 100% due to rounding

HIV exposed child follow-up

Malawi (national)

2013 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	6,863	100%

CPT status

On CPT	5,990	87%
Not on CPT	873	13%

HIV status

Current HIV infection status unknown	4,372	64%
HIV infection not confirmed, not ART eligible	4,343	99%
HIV infection not confirmed, ART eligible (PSHD)	29	1%
Current HIV infection status known	2,491	36%
Confirmed not infected	2,407	97%
Confirmed infected (ART eligible)	84	3%

ART eligibility summary

Not eligible for ART	6,750	98%
ART eligible	113	2%
ART not initiated	56	50%
Initiated ART	57	50%

Primary follow-up outcome

Discharged uninfected	52	1%
Continue follow-up	6,039	89%
Started ART	57	1%
Defaulted	630	9%
Died	23	0%

Transfers between sites

Total not transferred out	6,801	99%
Transferred out	62	1%

Age 12 months

Age cohort outcomes

*

Total children in birth cohort

Total children registered	7,344	100%

CPT status

On CPT	5,244	71%
Not on CPT	2,100	29%

HIV status

Current HIV infection status unknown	5,246	71%
HIV infection not confirmed, not ART eligible	5,235	100%
HIV infection not confirmed, ART eligible (PSHD)	11	0%
Current HIV infection status known	2,098	29%
Confirmed not infected	1,967	94%
Confirmed infected (ART eligible)	131	6%

* Subgroups may not add to 100% due to rounding

HIV exposed child follow-up

Malawi (national)

2013 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Age cohort outcomes

*

ART eligibility summary

Not eligible for ART	7,202	98%
ART eligible	142	2%
ART not initiated	-8	-6%
Initiated ART	150	106%

Primary follow-up outcome

Discharged uninfected	65	1%
Continue follow-up	4,948	69%
Started ART	150	2%
Defaulted	1,965	27%
Died	51	1%

Transfers between sites

Total not transferred out	7,179	98%
Transferred out	165	2%

Age 24 months

Age cohort outcomes

*

Total children in birth cohort

Total children registered	4,397	100%

CPT status

On CPT	1,677	38%
Not on CPT	2,720	62%

HIV status

Current HIV infection status unknown	2,641	60%
HIV infection not confirmed, not ART eligible	2,594	98%
HIV infection not confirmed, ART eligible (PSHD)	47	2%
Current HIV infection status known	1,756	40%
Confirmed not infected	1,589	90%
Confirmed infected (ART eligible)	167	10%

ART eligibility summary

Not eligible for ART	4,183	95%
ART eligible	214	5%
ART not initiated	38	18%
Initiated ART	176	82%

Primary follow-up outcome

Discharged uninfected	1,359	32%
Continue follow-up	764	18%
Started ART	176	4%
Defaulted	1,915	45%
Died	60	1%

Transfers between sites

Total not transferred out	4,274	97%
Transferred out	123	3%

* Subgroups may not add to 100% due to rounding

Antenatal Care

Malawi (national)

2013 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	160,355	100%

ANC cohort analysis *

Total women completing ANC in the reporting period

Total women in booking cohort	153,561	100%

Visits per woman

Women with 1 visit	33,401	22%
Women with 2 visits	39,381	26%
Women with 3 visits	45,295	29%
Women with 4 visits	28,208	18%
Women with 5+ visits	7,276	5%

Trimester of first visit

Started ANC 0-12 wks	14,298	9%
Started ANC 13+ wks	139,263	91%

Pre-eclampsia

No pre-eclampsia	150,736	98%
Pre-eclampsia	2,825	2%

TTV doses

0-1 TTV doses	69,223	45%
2+ TTV doses	84,338	55%

SP tablets

0 SP doses	15,153	10%
1 SP dose (1 x 3 tabs)	43,748	28%
6+ SP tablets (2 x 3 tabs)	94,660	62%

FeFo tablets

0-119 FeFo tablets	110,021	72%
120+ FeFo tablets	43,540	28%

Albendazole (Deworming)

0 Albend. doses	27,102	17%
1 Albend. dose	128,538	83%

ITN (bednets)

No ITN	41,755	27%
ITN received	110,712	73%

Syphilis status

Not tested for syphilis		141,287	92%
Tested for syphilis		12,274	8%
	Syphilis negative	11,205	91%
	Syphilis positive	1,069	9%

* Subgroups may not add to 100% due to rounding

Antenatal Care

Malawi (national)

2013 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

ANC cohort analysis

*

HIV status ascertainment

HIV status not ascertained	25,539	17%
HIV status ascertained	128,022	83%
Valid previous test result	7,945	6%
Previous negative	4,154	52%
Previous positive	3,791	48%
New test at ANC	120,077	94%
New negative	113,880	95%
New positive	6,197	5%

HIV status summary

Total women HIV negative	118,034	92%
Total women HIV positive	9,988	8%

CPT status (among HIV pos)

Not on CPT	1,188	12%
On CPT	8,800	88%

Final PMTCT regimen mother

No ARVs	1,080	11%
Any ARVs	8,908	89%
ART (by time of initiation)	8,908	100%
Already on ART when starting ANC	3,244	36%
Started ART at 0-27 weeks of pregnancy	4,227	47%
Started ART at 28+ weeks of preg.	1,437	16%

Baby's ARVs dispensed

No ARVs dispensed for infant	3,093	31%
ARVs dispensed for infant	6,895	69%

* Subgroups may not add to 100% due to rounding

Maternity

Malawi (national)

2013 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)	132,279	100%
Not referred to other site (total women)	125,100	95%
Referred out before delivery (multiple admissions)	7,179	5%

HIV status ascertainment

HIV status not ascertained	10,177	8%
HIV status ascertained	122,392	92%
Valid previous test result	118,946	97%
Previous negative	109,944	92%
Previous positive	9,002	8%
New test at maternity	3,446	3%
New negative	3,111	90%
New positive	335	10%

HIV status summary

Total women HIV negative	113,055	92%
Total women HIV positive	9,337	8%

ARVs during pregnancy (among HIV pos)

No ARV in pregnancy	429	5%
Any ARVs	8,908	95%
ART (by time of initiation)	8,908	100%
ART initiated before pregnancy	5,041	57%
ART initiated in 1st / 2nd trimester	1,764	20%
ART initiated in 3rd trimester	1,805	20%
ART initiated during labour	298	3%

Obstetric complications

No obstetric complications	116,622	88%
Any obstetric complications	15,947	12%
Haemorrhage	2,660	17%
Haemorrhage ante-partum	756	28%
Haemorrhage post-partum	1,904	72%
Obstr / prol labour	5,354	34%
(pre-) Eclampsia	1,160	7%
Maternal sepsis	145	1%
Ruptured uterus	194	1%
Other obstetric complications	6,434	40%

Emergency obstetric care

Oxytocin	116,738	96%
Anticonvulsive	544	0%
Antibiotics	3,838	3%
Blood transfusion	271	0%
Manual removal of placenta	525	0%

Vitamin A

Vit A not given	47,050	35%
Vit A given	85,519	65%

Maternity

Malawi (national)

2013 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	119,266	95%
Category B: PA, WA, HSA	1,010	1%
Category C: Other	5,114	4%

Mother survival

Mother alive	125,117	100%
Mother died	273	0%

Infant details

*

Single babies / multiple deliveries

Total babies delivered	127,783	100%
Single babies	122,857	96%
Twin / multiple babies	4,926	4%

Delivery place

Total deliveries at a health facility	122,356	96%
This facility	121,863	100%
Other facility	493	0%
Total deliveries before reaching the facility	5,427	4%
In transit	3,394	63%
Home / TBA	2,033	37%

Delivery mode

Spontaneous vaginal	115,481	90%
Vacuum extraction	1,632	1%
Breech	2,407	2%
Caesarean section	8,263	6%

Infant complications

No infant complications	113,626	89%
Total infants with complications	14,157	11%
Prematurity	3,111	22%
Weight less 2500g	4,493	32%
Asphyxia	4,133	29%
Sepsis	601	4%
Other newborn complication	1,819	13%

Infant survival

Total live births	125,557	98%
Discharged alive	124,301	99%
Neonatal deaths	1,256	1%
Stillbirths	2,226	2%
Stillbirth, fresh	1,225	55%
Stillbirth, macerated	1,001	45%

* Subgroups may not add to 100% due to rounding

Maternity

Malawi (national)

2013 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	8,460	7%
Infants with known HIV exposure status	115,841	93%
Not HIV exposed	107,277	93%
HIV exposed	8,564	7%
Received no ARVs	623	7%
Received ARVs	7,941	93%
Nevirapine	7,941	100%

Breastfeeding initiated

BF not started within 60min	9,522	7%
BF started within 60min	118,261	93%

Tetracycline eye ointment given

TO not given	27,046	21%
TO given	100,737	79%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2013 Q3 (Quarter)

Registration details

*

ART clinic registrations

Total ART clinic registrations	34,243	100%

Registration type

First time ART initiations (total patients)	25,551	75%
ART re-initiations	434	1%
ART transfers in	8,258	24%

Sex

Males	11,554	34%
Females	22,689	66%
Non-pregnant	15,942	70%
Pregnant	6,747	30%

Age at ART initiation

Adults 15+ yrs	31,442	92%
Children 0-14 yrs	2,801	8%
Children 2-14 yrs	2,018	72%
Children below 24 mths	783	28%

Reason for starting ART

Presumed severe HIV Disease	143	0%
Confirmed HIV infection	34,100	100%
WHO stage 1 or 2	19,389	57%
Total lymphocytes <threshold	252	1%
CD4 below threshold	10,131	52%
CD4 unknown or >threshold	9,006	46%
PCR infants	207	2%
Children 12-23 mths	539	6%
Pregnant women	6,429	71%
Breastfeeding mothers	1,831	20%
WHO stage 3	12,289	36%
WHO stage 4	2,049	6%
Unknown / reason outside of guidelines	373	1%

TB at ART initiation

Never TB / TB > 24 months ago	32,810	96%
TB within the last 24 months	526	2%
Current episode of TB	907	3%

Kaposi's sarcoma at ART initiation

No KS	33,823	99%
Patients with KS	420	1%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2013 Q3 (Cumulative)

Registration details

*

ART clinic registrations

Total ART clinic registrations	793,286	100%

Registration type

First time ART initiations (total patients)	641,158	81%
ART re-initiations	7,295	1%
ART transfers in	144,833	18%

Sex

Males	286,696	36%
Females	506,590	64%
Non-pregnant	430,849	85%
Pregnant	75,741	15%

Age at ART initiation

Adults 15+ yrs	721,951	91%
Children 0-14 yrs	71,335	9%
Children 2-14 yrs	54,508	76%
Children below 24 mths	16,827	24%

Reason for starting ART

Presumed severe HIV Disease	2,924	0%
Confirmed HIV infection	790,362	100%
WHO stage 1 or 2	299,170	38%
Total lymphocytes <threshold	2,626	1%
CD4 below threshold	204,189	68%
CD4 unknown or >threshold	92,355	31%
PCR infants	2,347	3%
Children 12-23 mths	9,096	10%
Pregnant women	55,182	60%
Breastfeeding mothers	25,730	28%
WHO stage 3	396,253	50%
WHO stage 4	88,358	11%
Unknown / reason outside of guidelines	6,581	1%

TB at ART initiation

Never TB / TB > 24 months ago	727,238	92%
TB within the last 24 months	36,897	5%
Current episode of TB	29,151	4%

Kaposi's sarcoma at ART initiation

No KS	775,541	98%
Patients with KS	17,745	2%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2013 Q3 (Cumulative)

ART outcomes

*

Primary follow-up outcomes

Total alive on ART		459,261	71%
	Alive on ART at site of last registration	451,980	98%
	ART patients in transit between sites	7,281	2%
Defaulted		122,238	19%
Stopped ART		2,658	0%
Total died		64,293	10%
	Died month 1	16,939	26%
	Died month 2	10,922	17%
	Died month 3	6,300	10%
	Died month 4+	30,132	47%

Transfers between sites

Total not transferred out		641,172	81%
Transferred out		152,114	19%

ART regimens

First line regimens		448,286	99%
	Adult formulation	424,961	95%
		Regimen 1A	83,204	20%
		Regimen 2A	27,518	6%
		Regimen 3A	2,725	1%
		Regimen 4A	822	0%
		Regimen 5A	309,127	73%
		Regimen 6A	1,565	0%
	Paed. formulation	23,325	5%
		Regimen 1P	710	3%
		Regimen 2P	22,202	95%
		Regimen 3P	135	1%
		Regimen 4P	278	1%
Second line regimens		3,311	1%
	Adult formulation	2,936	89%
		Regimen 7A	2,579	88%
		Regimen 8A	357	12%
	Paed. Formulation	375	11%
		Regimen 9P	375	100%
Other regimen (adult / paed)		383	0%

Adherence

Adherence unknown (not recorded)		17,218	4%
Adherence recorded		434,762	96%
	0-6 doses missed	390,005	90%
	7+ doses missed	44,757	10%

ART side effects

Side effects unknown (not recorded)		39,586	9%
Side effects recorded		412,394	91%
	No side effects	402,184	98%
	Any side effects	10,210	2%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2013 Q3 (Cumulative)

ART outcomes

*

Current TB status among ART patients (ICF)

ICF not done (Current TB status unknown/ not circ)		5,742	1%
ICF done		446,238	99%
	TB not suspected	442,809	99%
	TB suspected	1,775	0%
	TB confirmed	1,654	0%
		TB confirmed, not on treatment	278	17%
		TB confirmed, on TB treatment	1,376	83%

* Subgroups may not add to 100% due to rounding

STI site report

Malawi (national)

2013 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

STI clients treated in the reporting period *

Total STI clients

Total STI clients treated		45,948	100%
	Index patients treated (symptomatic)	36,811	80%
	Partners treated	9,137	20%

Sex

Males		18,851	41%
Females		27,097	59%
	Non-pregnant	23,783	88%
	Pregnant	3,314	12%

Age group

Age group A (0-19 years)		3,731	8%
Age group B (20-24 years)		10,473	23%
Age group C (25+ years)		31,744	69%

Client type

Symptomatic cases		40,587	88%
	Index cases	36,811	91%
	Partners symptomatic	3,776	9%
Partners asymptomatic		5,361	12%

STI treatment history

Never treated for STI		33,958	74%
Previously treated for STI		11,990	26%
	Old >3 months ago	8,171	68%
	Recent ≤3 months ago	3,819	32%

STI syndromic diagnosis

GUD		8,273	17%
UD		11,455	23%
AVD		13,674	28%
	Low risk	5,563	41%
	High risk	8,111	59%
LAP		7,830	16%
SS		854	2%
BU		733	1%
BA		989	2%
NC		275	1%
Genital Warts		555	1%
Syphilis RPR VDRL		1,108	2%
Other STI		3,576	7%

STI partner notification

Total partner notification slips issued		12,737	100%
	Total partners returned	9,137	72%
	Total partners not seen	3,600	28%

* Subgroups may not add to 100% due to rounding

STI site report

Malawi (national)

2013 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

STI clients treated in the reporting period

*

HIV test / ART status

HIV status not ascertained	25,400	55%
HIV status ascertained	20,548	45%
HIV negative (new test)	13,467	66%
HIV positive	7,081	34%
New positive	1,331	19%
Previous positive	5,750	81%
Not on ART	1,953	34%
On ART	3,797	66%

STI clients referred for services

Lab	539	4%
Gynae review	245	2%
Surgical review	153	1%
Repeat HTC	11,150	80%
ART (for assessment)	651	5%
PMTCT	93	1%
Other (service referrals)	1,126	8%

* Subgroups may not add to 100% due to rounding