Government of Malawi Ministry of Health

Integrated HIV Program Report
April - June 2013

- *Integrated HIV Program Supervision*
- *HIV Testing and Counselling / Early Infant Diagnosis*
- *Blood Safety*
- *Post Exposure Prophylaxis*
- *HIV Exposed Child Follow-Up*
- *Pre-ART*
- *Prevention of Mother to Child Transmission / Antiretroviral Therapy*
- *TB / HIV*
- *Sexually Transmitted Infections*
- *Supply of HIV Program Commodities*

1 Executive Summary

This is the 8th quarterly HIV Program report after implementation of the 2011 Integrated Clinical HIV Guidelines in July 2011. A summary of the key achievements between **April and June 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
  - **671** (static) ART sites
  - **588** PMTCT sites (Option B+)
  - **623** Pre-ART sites
  - **603** sites with HIV-exposed child follow-up
- **462,334** persons were tested and counselled for HIV and **37,852 (8%)** were HIV positive; **156,875 (34%)** people tested for the first time.
- **16,763 (98%)** of 17,142 blood units collected were screened for HIV, hepatitis B and syphilis.
- **113,061 (77%)** of 147,586 women at ANC had their HIV status ascertained; **9,282 (8%)** of these were HIV positive. **108,861 (92%)** of 118,402 women at maternity had their HIV status ascertained; **8,285 (8%)** of these were HIV positive.
- **26,802** patients started ART during this quarter; this is similar to the previous quarter (**26,881**).
- **443,221** patients were alive and on ART by end of June 2013. This is equivalent to **74%** coverage of the estimated 602,000 population in need of ART (all ages; 2013 Spectrum estimates based on current definition of eligibility for ART in Malawi).
- **105,326 (26%)** of 408,013 on first line adult regimens were on ART regimen 5A (tenofovir / lamivudine / efavirenz).
- **80%** of adults and **82%** of children were retained alive on ART at 12 months after ART initiation.
- A total of **11,452** HIV positive pregnant women were on ART: **4,343 (38%)** of these were already on ART when getting pregnant and **7,109 (62%)** started ART during pregnancy/delivery. This is equivalent to **73%** ART coverage among the estimated 15,750 HIV infected pregnant women in Malawi this quarter. **6,910** (97%) of pregnant women started ART due to ***Option B+*** (in WHO clinical stage 1 or 2) and **199** (3%) due to a low CD4 count and/or WHO clinical stage 3 or 4.
- An additional **2,164** breastfeeding women started ART due to ***Option B+*** (in WHO clinical stage 1 or 2).
- 5,941 (**77%**) of 7,709 women started under ***Option B+*** were retained at **6 months** after ART initiation; 5,778 (**76%**) of 7569 were retained at **12 months** after ART initiation.
- **7,520 (7%)** of infants discharged alive from maternity were known to be HIV exposed, **7,005 (93%)** of these received ARV prophylaxis (nevirapine). **5,026 (67%)** were enrolled in exposed child follow-up before age 2 months.
- A total of **10,277** HIV exposed children and **9,886** pre-ART patients were enrolled for follow-up in *HIV Care Clinics (HCC)* during this quarter.
- **112** medical staff were newly trained and certified in PMTCT/ART this quarter. This brings the total number trained in the 2011 guidelines to **5,823**.
- About **300** staff (mainly HSAs) at **52** facilities received mentoring for collection of dried blood samples for Early Infant Diagnosis and documentation of results.
- **2,533** HTC providers were re-trained using the *HTC Skills Intensive Training* curriculum.
- A total of **61** staff at **46** sites in 4 districts received clinical mentoring during a total of 90 mentoring visits (mentoring program reports remained incomplete for this quarter).

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. Transition to regimen 5A had to be restricted to certain patient groups due to funding limitations. Additional funding from Global Fund and from PEPFAR has now been secured and a full transition is scheduled to start 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.

The integrated laboratory supervision for the quality improvement of HIV testing services could not take place this time due to the ongoing preparation for the *2013 HTC Skills Intensive Trainings.*

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

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. However, HTC site supervision was suspended this quarter due to preparations for the *HTC Skills Intensive Trainings*.

3.2 Supervision Outcomes

686 public and private sector facilities were visited for **clinical HIV program supervision** between 15th July and 5th August 2013. The large number of sites was covered by **64** supervisors working in **20** teams. The teams spent a total of **1,738 working hours** at the sites. Each site visit lasted on average **2.5** hours, but up to 2 days were spent at the busiest sites. **278** clinic teams were awarded a *Certificate of Excellence* for **excellent performance.** The number of sites with excellent performance increased by 11 compared with the previous quarter. This signifies an actual improvement in operational performance, such as the integration of PMTCT/ART into ANC and MNCH services, which was added to the service quality checklist in the previous supervision round. **73** sites had significant weaknesses and were rated to require **intensive mentoring**. This is a slight increase from 61 in the previous quarter. The capacity to provide site mentoring will need to be further expanded over the next months.

Table 1: Outcomes of integrated HIV services supervision for 2013 Q2

Zone	Total facil. visited*	Supervision hours spent at facilities		Performance (# and % of sites)	
		Total	Average per site	Excellent perform.	Mentoring needed
NZ	123	301	2.4	45 37%	25 20%
CEZ	93	223	2.4	32 34%	19 20%
CWZ	158	339	2.2	70 44%	8 5%
SEZ	155	442	2.9	56 36%	7 5%
SWZ	157	433	2.8	75 48%	14 9%
Malawi	686	1,738	2.5	278 41%	73 11%

* 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. **88** sites had cumulatively registered more than 2,000 ART patient and **32** of these had registered more than 5,000. **34 (37%)** 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 Q2 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 Q2

Zone	Total fac.(1)	Facilities providing HIV services				CD4 count machines (2)		
		Exp. child	Pre-ART	PMTCT B+	ART	Installed	Functional	Results
NZ	122	112 92%	116 95%	106 87%	120 98%	22 18%	19 86%	3,562
CEZ	93	89 96%	88 95%	82 88%	91 98%	9 10%	8 89%	7,906
CWZ	159	126 79%	129 81%	125 79%	153 96%	24 15%	22 92%	3,362
SWZ	154	126 82%	142 92%	129 84%	154 100%	26 17%	24 92%	15,862
SEZ	155	150 97%	148 95%	146 94%	153 99%	21 14%	20 95%	6,794
Malawi	683	603 88%	623 91%	588 86%	671 98%	102 15%	93 91%	37,486

(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 **683** sites designated to provide clinical HIV services in Q2 2013, by zone. At the national level, there were **671** (static) sites with at least one patient on ART, **588** sites had enrolled women under PMTCT Option B+; **623** sites were providing pre-ART services and **603** had enrolled HIV exposed children for follow-up. ART services were now available at almost all designated sites in the 5 zones. The SW zone had reached 100% of designated sites with ART services and the SE zone was leading in terms of PMTCT Option B+ sites (94% of designated sites).

CD4 count machines (including 'point of care' machines) were installed at **102** sites, and 93 **(91%)** of these had produced at least 1 result during Q2. The total number of CD4 results produced increased considerably from 30,714 in Q1 to **37,486** during Q2. 42% 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

462,334 people[1] were tested and counselled for HIV between April and June 2013. This is a further slight increase by 1,775 from the previous quarter. **37,852** (8.2%) of all people tested were HIV positive.

Out of 462,334 people tested and counselled, **33%** were males and **67%** were females. **50%** of females were pregnant. The proportion of males (**49%**) and non-pregnant females (**51%**) was very similar, implying gender balanced access to HTC services. Pregnant women have to be excluded

[1] 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 individual people.

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.

54% of all people tested and counselled were 25 years and above, **40%** were between 15-24 years and **6%** were children below 15 years. **92,035 (20%)** accessed HTC with their partners (as a couple), which is similar to the previous quarter.

156,875 (34%) of 462,334 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 **4,685,670** 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

A total of **7,818** DNA-PCR test results were dispatched from the **5 laboratories** in the national EID program in Q2 2013 (Mzuzu Central Hospital, Kamuzu Central Hospital, Queen Elizabeth Central Hospital, DREAM Blantyre and University of North Carolina in Lilongwe). **305** (**3.9%**) of these results were positive. Detailed data on the specimens processed were available from the lab management information system at MCH, KCH and QECH. These 3 labs dispatched a total of **6,937** DNA-PCR results to health facilities in Q2 2013. **4,339 (63%)** of these results were from samples collected in Q2 2013, while 2,583 (37%) were from samples collected in the previous quarters (for 15 results the collection date was missing). The median time between sample collection and dispatch of the result was **36 days**; 75% of results were dispatched between 28 and 44 days after sample collection.

2,976 (43%) of all results were from infants under 2 months old at the time of sample collection. 2,656 (38%) were 2-5 months, 1,138 (16%) were 6-11 months and 46 (1%) were 12 months or older when the sample was collected (date of birth was missing for 121).

Age at sample collection	Tot. Results	Positives	
<2 months	**2,976**	**62**	*2.1%*
2-5 months	**2,656**	**115**	*4.3%*
6-11 months	**1,138**	**88**	*7.7%*
12 months +	**46**	**2**	*4.4%*

270 (3.9%) of the 6,937 results from MCH, 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	**258**	*4%*	**3**	*1%*
2-5 months	**4,829**	*70%*	**146**	*54%*
6-11 months	**1,565**	*23%*	**106**	*39%*
12 months +	**178**	*3%*	**12**	*4%*
(missing date)	**107**	*2%*	**3**	*1%*
Total	**6,937**	***100%***	**270**	***100%***

Out of 270 positive results dispatched from the 3 labs, only 3 (1%) were sent before the child was 2 months old. A total of 149 (55%) positive results were sent before the child was 6 months old and 255 (95%) were sent before the child was 12 months old. A total of 158 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 **62%** of the positive DNA-PCR results dispatched for children <12 months this quarter.

7 Blood Safety

Blood safety data are included for the first time in this Integrated HIV Program report. 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 **17,142** blood units were collected in Malawi during Q2 2013. MBTS collected **12,443 (73%)** out of these, all of which were screened comprehensively for the relevant TTIs (HIV, Hepatitis B, Hepatitis C, syphilis, malaria). In addition, **43** hospitals in Malawi collected a total of **4,699** units from replacement donors. **4,320 (92%)** of the units collected from replacement donors were screened for at least the 3 key TTs (HIV, HepB and syphilis) and **611 (14%)** of these were also screened for HepC and malaria. This means that a total of **16,763 (98%)** 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, 5 donated units were screened only for HIV and HepB and and 19 units were screened for HIV only. 355 (8%) were screened with any other combination of tests for TTs.

A total of 6,908 potential replacement donors were documented in the blood donor registers at the facilities and 4,699 (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, 84% of potential donors were tested for HIV, 83% for HepB, 82% for syphilis, 35% for malaria and 18% 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 **634** persons received PEP during Q2 2013. This is an increase from the previous quarter (523).

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 Q2.

Zone	Pre-ART		ART		Both patient groups	
	Tot. women	On Depo	Tot. women	On Depo	Tot. women	On Depo
NZ	1,093	**381** *35%*	24,809	**8,690** *35%*	25,901	**9,071** *35%*
CEZ	667	**184** *28%*	20,225	**6,807** *34%*	20,892	**6,991** *33%*
CWZ	3,074	**450** *15%*	51,007	**12,227** *24%*	54,081	**12,677** *23%*
SEZ	4,376	**806** *18%*	74,069	**20,441** *28%*	78,445	**21,246** *27%*
SWZ	7,049	**500** *7%*	85,902	**11,657** *14%*	92,951	**12,157** *13%*
Malawi	16,259	**2,321** *14%*	256,011	**59,821** *23%*	272,270	**62,142** *23%*

* 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 **62,142 (23%)** women received Depo-Provera from HIV clinics in Q2 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 536 (80%) of ART/PMTCT sites having stocks of Depo-Provera in July 2013. 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 **491,435 (89%)** of all patients in care were on CPT at the end of Q2 2013. Compared with the previous quarter, coverage had further increased (from 80% to 89%). CPT coverage among ART patients had fully normalized to 93% following the resumption of quarterly distribution of cotrimoxazole for CPT (see page 25 for further supply chain details).

Table 4: Number and % of patients retained in HIV care who were on cotrimoxazole and isoniazid preventive therapy (CPT, IPT) by the end of 2013 Q2.

	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	5,941	**3,171** *53%*	3,551	**3,424** *96%*	44,151	**42,760** *97%*	53,643	**49,356** *92%*	3,551	**2,115** *60%*
CEZ	5,933	**2,811** *47%*	2,438	**2,294** *94%*	35,344	**33,864** *96%*	43,715	**38,969** *89%*	2,438	**1,747** *72%*
CWZ	12,674	**7,982** *63%*	8,950	**7,880** *88%*	89,027	**83,598** *94%*	110,651	**99,460** *90%*	8,950	**5,792** *65%*
SEZ	22,771	**13,974** *61%*	13,516	**12,482** *92%*	118,516	**114,271** *96%*	154,803	**140,727** *91%*	13,516	**6,426** *48%*
SWZ	23,282	**15,595** *67%*	18,674	**15,922** *85%*	148,072	**131,405** *89%*	190,028	**162,922** *86%*	18,674	**11,337** *61%*
Malawi	70,601	**43,533** *62%*	47,129	**42,002** *89%*	435,110	**405,900** *93%*	552,840	**491,435** *89%*	47,129	**27,418** *58%*

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.

407,315 (94%) of all patients retained on ART were screened for TB at their last visit before end of June 2013. As of that visit, **3,054 (1%)** patients were new TB suspects and had presumably been referred for examination by a clinician and for TB investigations. **1,869 (<1%)** patients had confirmed TB (clinical or lab based). Out of these, **1,553 (83%)** were confirmed to be on TB treatment and **316 (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)	**27,795**	**6%**
ICF done	**407,315**	**94%**
TB not suspected	**402,392**	99%
TB suspected	**3,054**	1%
TB confirmed	**1,869**	0%
TB confirmed, not on treatment	**316**	17%
TB confirmed, on TB treatment	**1,553**	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. **27,418 (58%)** of 47,129 patients retained in pre-ART were on IPT by the end of June 2013. This is a considerable increase from the 21,687 patients who had been on IPT at the end of the previous quarter. Isoniazid was in stock at 419 facilities during the July 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. TB program data could not be reconciled with the National TB Control Program this quarter and TB/HIV case finding data cannot be presented in this report.

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. The number of cases registered (and treated) for acute cryptococcal meningitis and oesophageal candidiasis continued to increase to **625** and **1,040** in Q2 2013, respectively. This increase is attributed to the much wider availability of fluconazole in health facilities.

449 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 Q3	5,723	5,257 *92%*	3,179 *60%*	1,775 *56%*	492	117	293
2012 Q4	5,013	4,654 *93%*	2,540 *55%*	1,423 *56%*	428		
2013 Q1					444	472	900
2013 Q2					449	625	1,040

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 7th quarterly report from the standard follow-up program for HIV exposed children. **9,886** HIV exposed children were newly enrolled into follow-up during Q2 2013; **5,026 (51%)** of these were under the age of 2 months. This represents timely enrolment for **67%** of the 7,520 known HIV exposed children discharged from maternity this quarter. The total number of new enrolments (9,886) exceeds by 2,366 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 **6,691** infants in the **2 month age cohort**. **1,779 (27%)** had received a DNA-PCR result. 49 **(3%)** of these were confirmed HIV infected. An additional **15** infants were diagnosed with *presumed severe HIV disease,* which means that a total of **64** infants were eligible for ART. **43 (67%)** of these had started ART. The proportion of positives starting ART early was similar to the previous quarter (69%). Out of the entire 2-month age cohort, **6,007 (90%)** were retained in exposed child follow-up, **43 (1%)** had started ART and **17 (<1%)** were discharged confirmed uninfected[2]. **20 (<1%)** were known to have died and **552 (8%)** had been lost to follow-up.

There were **6,784** children in the **12 month age cohort**. Current HIV infection status was known for **1,832 (27%)** children (DNA-PCR or rapid antibody test) and **126 (7%)** of these were confirmed HIV infected. **37 (1%)** additional children had been diagnosed with *presumed severe HIV disease,* which means that a total of **163** children were eligible for ART. **104 (64%)** of these had started ART. Out of the entire age cohort, **4,628 (70%)** were retained in exposed child follow-up, **104 (2%)** had started ART and **50 (1%)** were discharged confirmed uninfected[2]. **1,822 (27%)** were lost to follow-up and **54 (1%)** were known to have died.

There were **3,478** children in the **24 month age cohort**. Current HIV infection status was known for **1,483 (43%)** children (DNA-PCR or rapid antibody test) and **148 (10%)** of these were confirmed HIV infected. **44** additional children had been diagnosed with *presumed severe HIV disease,* which means that a total of **192** children were eligible for ART. **144 (75%)** of these had started ART. Out of the entire age cohort, **693 (20%)** were retained in exposed child follow-up, **144 (4%)** had started ART and **1,168 (34%)** were discharged confirmed uninfected[2]. **1,369 (40%)** were lost to follow-up and **51 (1%)** were known to have died.

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

Confirmed HIV-free survival at age 24 months in this quarter was only **34%**, which was implausibly low and related to the fact that only 43% in this cohort had a known HIV status. 1,995 (57%) children were classified as '*current HIV infection status unknown*' and many of these may be among the 1,369 children lost to follow-up and the 51 children who had died. However, 693 (20%) 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 **10,277** patients were newly registered for pre-ART follow-up in Q2 2013. **881 (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 **140,640**.

14.2 Cumulative Pre-ART Follow-up Outcomes

47,129 (34%) of all patients ever registered were retained in pre-ART follow-up by the end of June 2013; **59,429 (43%)** had started ART; **28,790 (21%)** had been lost to follow-up; **1,620 (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, **10,000** pre-ART patients started ART during Q2 2013, **2,555** were lost to follow-up and **68** died.

CPT coverage among pre-ART patients increased from 80% in the previous quarter to **42,002 (89%)** in Q2 2013 while IPT coverage increased from 44% to **27,418 (58%)**. **2,321 (14%)** of 16,259 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 have been 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

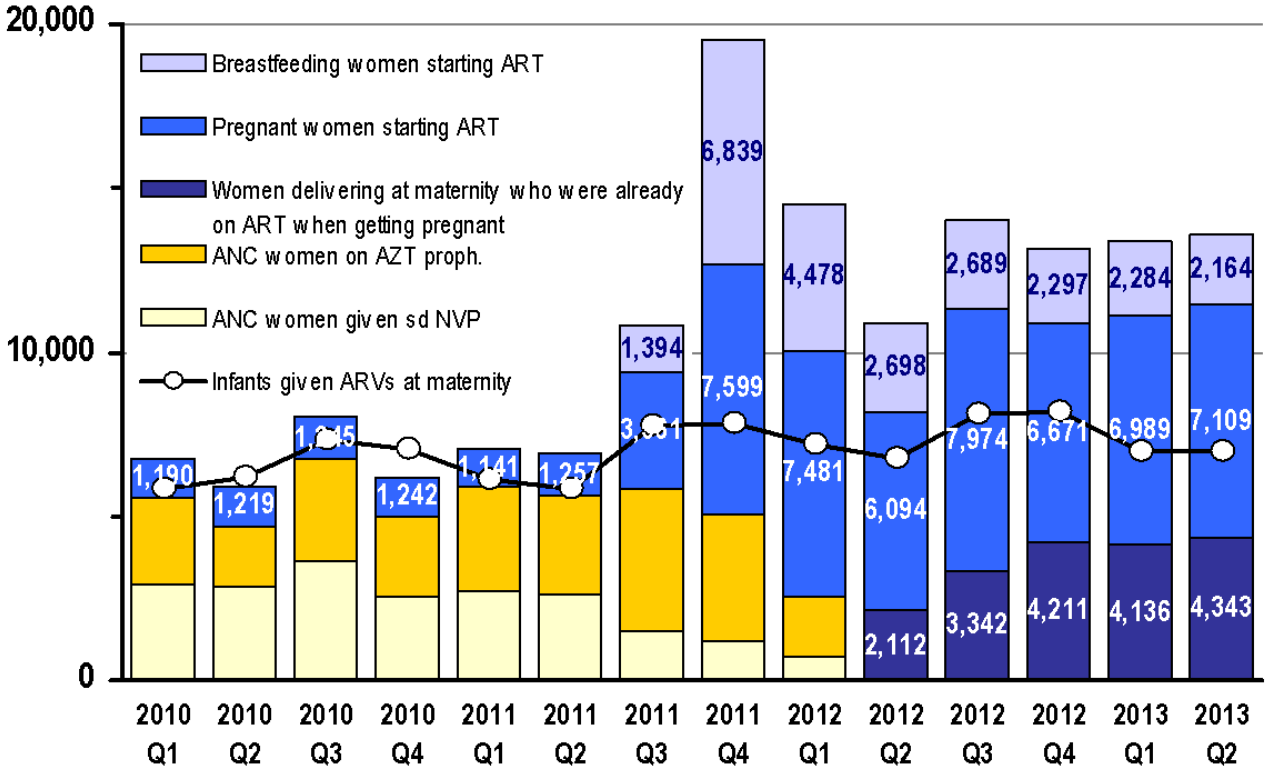
11,452 pregnant women were on ART in Q2 2013. This is based on the **4,343** women at maternity who were already on ART when getting pregnant (maternity report, see below) and the **7,109** women who newly initiated ART while pregnant (ART report, see below). An additional **2,164** breastfeeding women 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 **9,273**. 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. **7,005** 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 **11,452** pregnant women on ART in Q2 2013 represent **73% coverage** of the estimated 15,750 HIV positive pregnant women in the population per quarter. This is a further 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**.

163,995 women attended ANC for their first visit between April and June 2013. This exceeds the estimated 151,750 pregnant women in the Malawian population during one quarter.

The following report covers the outcomes of the **147,586** women who started ANC between October and December 2012 and who had finished ANC by June 2013. **12,981 (9%)** of the women started ANC in their first trimester. **20,454 (14%)** of the women were tested for syphilis at ANC and **816 (4%)** were syphilis positive. The low testing rate probably explains the higher (4%) than expected proportion (<1%) found positive as the testing was likely selective of those suspected to be positive. Only **28,893 (20%)** of women in this cohort attended the minimum of 4 focussed ANC visits.

15.3.1 HIV Ascertainment at ANC

113,061 (77%) of ANC attendees had their HIV status ascertained. This is similar to the previous quarter (78%). Out of all women whose HIV status was ascertained, **9,150 (8%)** presented with a valid documented previous HIV test result and **103,911 (92%)** received a new HIV test result at ANC. A total of **9,282 (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

8,094 (87%) of (known) HIV infected women attending ANC received ART. This represents **51%** coverage of the estimated 15,750 HIV positive pregnant women per quarter at the population level. ART coverage among pregnant women decreased from the previous quarter, mainly due to the lower overall number of women in this ANC cohort (who started ANC between October and December 2012). The number of new ANC registrations between October and December has been lower than in the other quarters over the last years. 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 **8,094** ANC women who were known to receive ART, **2,860 (35%)** were already on ART when starting ANC, **3,799 (47%)** initiated before 28 weeks of pregnancy and **1,435 (18%)** initiated during the last trimester of pregnancy. Based on the ART report, about **1,875** additional pregnant women initiated ART this quarter and most of these are assumed to have started ART after their last ANC visit.

7,808 (84%) of HIV infected women at ANC were on Cotrimoxazole Preventive Therapy.

5,891 (63%) of HIV infected women attending ANC received the infant dose of ARVs (nevirapine syrup) to take home. This is similar to the previous quarter (62%).

15.5 HIV Services at Maternity

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

Between April and June 2013, **111,869** women were admitted for delivery to maternity; **6,533 (5%)** of these were referred to another facility before delivery, resulting in **118,402** total admissions to maternity during Q2 2012. Out of all admissions, **108,761 (96%)** delivered at health facilities, while **4,927 (4%)** had already delivered before reaching a facility. The **108,761** facility deliveries represent **72%** of the estimated 151,750 deliveries in the population which is less than the 83% reported in the Integrated Household Survey Report of 2010-2011.

A total of **105,818 (95%)** deliveries were conducted by skilled birth attendants, **991 (1%)** by paramedical staff and **4,649 (4%)** were not attended by any of the above (probably mainly among women who delivered before reaching maternity). **14,393 (12%)** of women developed obstetric complications. The most common leading complications were obstructed / prolonged labour (**4,948** cases) and post-partum haemorrhage (**1,704** cases). A total of **113,688** babies were born, **109,236 (96%)** were singletons and **4,452 (4%)** were twins/multiples. There were **111,802 (98%)** live births and **1,886 (2%)** stillbirths. **110,697 (99%)** of babies born alive were discharged alive and **1,105 (1%)** died before discharge. **11,251 (>99%)** of women were discharged alive and **207 (<1%)** women died before discharge, which is equivalent to a maternal mortality ratio of **185 per 100,000** live births among women attending maternity.

15.5.1 HIV Ascertainment at Maternity

108,861 (92%) women had their HIV status ascertained at maternity. Out of these, **105,081 (97%)** presented with a valid previous HIV test result and **3,780 (3%)** received a new HIV test result. A total of **8,285 (8%)** women were HIV positive and **100,576 (92%)** were negative. The **108,861** women whose HIV status was ascertained at maternity represent **72%** of the expected 151,750 women delivering in the population.

HIV exposure status was ascertained for **102,880 (93%)** out of 110,697 babies born and discharged alive. **7,520 (7%)** of these were born to a known HIV positive mother.

15.5.2 ARV Coverage at Maternity

A total of **7,905 (95%)** of HIV infected women attending maternity received ART. This is a slight increase from the previous quarter (7,842). Out of these, **4,343 (55%)** had started ART before pregnancy, **1,433 (18%)** initiated ART during the 1st or 2nd trimester, **1,752 (22%)** initiated during the 3rd trimester and **377 (5%)** initiated ART at maternity.

A total of **7,005 (93%)** of infants who were known HIV exposed and discharged alive started daily NVP prophylaxis at maternity. This represents **44%** 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 **Annex**.

16.1 New ART Registrations during Q2 2013

By the end of June 2013, there were **671 static ART sites** in Malawi, managed by government, mission, NGOs and the private sector. Out of these, **70** were ART facilities in the private sector, charging a nominal MK500 per monthly prescription of drugs per patient.

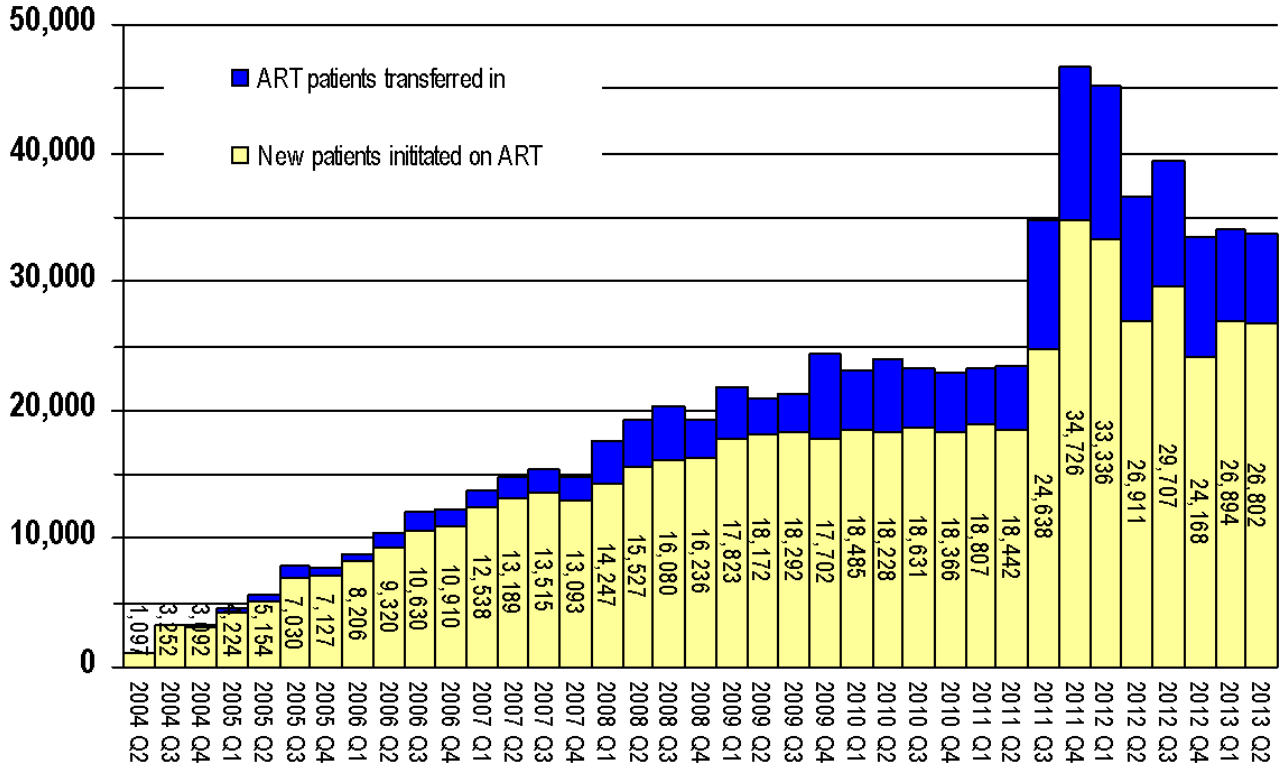
Implementation of the Malawi Integrated Clinical HIV Guidelines started in July 2011 and triggered a massive surge in new ART initiations (see **Figure 2**). In Q2 2013, **26,802** patients initiated ART and 6,378 patients were registered as a transfer in (already on treatment; 19% out of all 33,615 clinic registrations). These numbers are similar to the previous quarter.

Among all new registrations **34%** were males and **66%** females. **7,109 (32%)** of all females were pregnant and **6,910 (97%)** of these were started under ***Option B+*** in WHO stage 1 or 2, independent of their CD4 count. **199** 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 **2,164** women in WHO stage 1 or 2 were started because of breastfeeding, bringing the total number of women started under ***Option B+*** [3] to **10,074**. The number of ART initiations in Q2 2013 remained slightly lower than projected, probably mainly due to challenges with HIV testing.

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

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 **18,746 (56%)** of all patients started in WHO stage 1 or 2. **9,221 (49%)** of these started due to a CD4 count below 350, which is equivalent to **92%** of the 10,000 pre-ART patients who started ART this quarter. Access to scheduled CD4 count monitoring in pre-ART clinics remains limited although the number of results produced increased from 30,714 in Q1 to 37,486 Q2 2013. The roll-out of scheduled CD4 count monitoring in the Pre-ART program is expected to increase the number of early ART initiations.

12,321 (37%) of patients registered started in WHO stage 3 and **1,931 (6%)** started in stage 4.

2,710 children were registered in Q2 2013. **279** 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 slight decrease from the previous quarter (339). **156** children started ART with presumed severe HIV disease, which was similar to the previous quarter (199). The number of infants in WHO stage 1 or 2 who started due to confirmed HIV infection through DNA-PCR increased from 126 in Q1 to **158** in Q2 2013. This number is equivalent to **52%** of the 305 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 7,520 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)[4], only about 218 of these known HIV exposed infants may have been infected perinatally during Q2 2013. The most significant bottleneck for early infant treatment remains the identification of HIV infected pregnant / breastfeeding women.

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

1,501 (4%) out of all ART clinic registrations were patients with TB: **1,052 (3%)** had a current and **492 (1%)** a recent history of TB. **449 (1%)** of patients registered had Kaposi's sarcoma.

16.2 Cumulative ART Registrations up to June 2013

By the end of June, there were a cumulative total of **759,391** clinic registrations, representing **615,646 (81%)** patients who newly initiated ART and **136,948 (18%)** patients who transferred between clinics. **6,797** (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 **24,069** (3.2%) of total patient registrations.

16.3 ART Outcomes

443,221 patients were alive on ART by the end of June 2013. This number includes **8,111** patients who were assumed to be 'in transit' as of the 30st June 2013, based on the difference between **145,059** patients *transferred out* and **136,948** 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 **615,646** patients ever initiated on ART, **443,221 (71%)** were retained alive on ART, **62,231 (10%)** were known to have died, 114,481 **(18%)** were lost to follow-up and **2,510** (<1%) were known to have stopped ART. An estimated **403,172** adults and **40,049** children (<15 years) were alive on ART by the end of June 2013**.**

Figure 3: Patients alive on ART in public and private sector clinics in Malawi

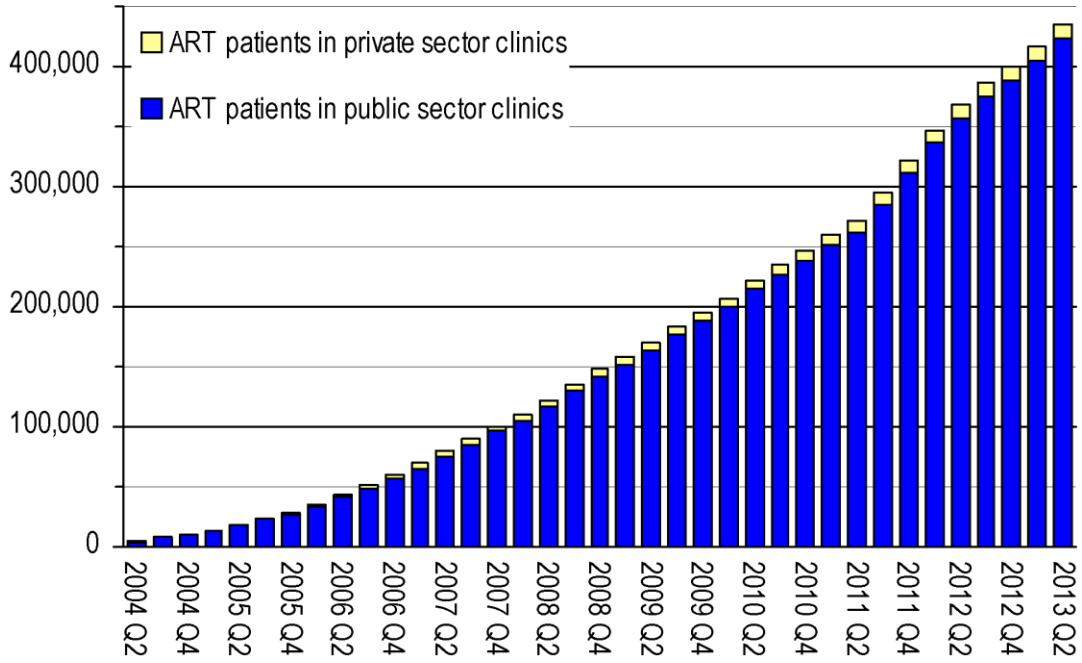


Figure 3 shows the increase of patients alive on ART by the end of each quarter. The number of patients alive on ART **increased by 20,355** in Q2 of 2013. The quarterly growth has continued to accelerate over the last 2 quarters.

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)

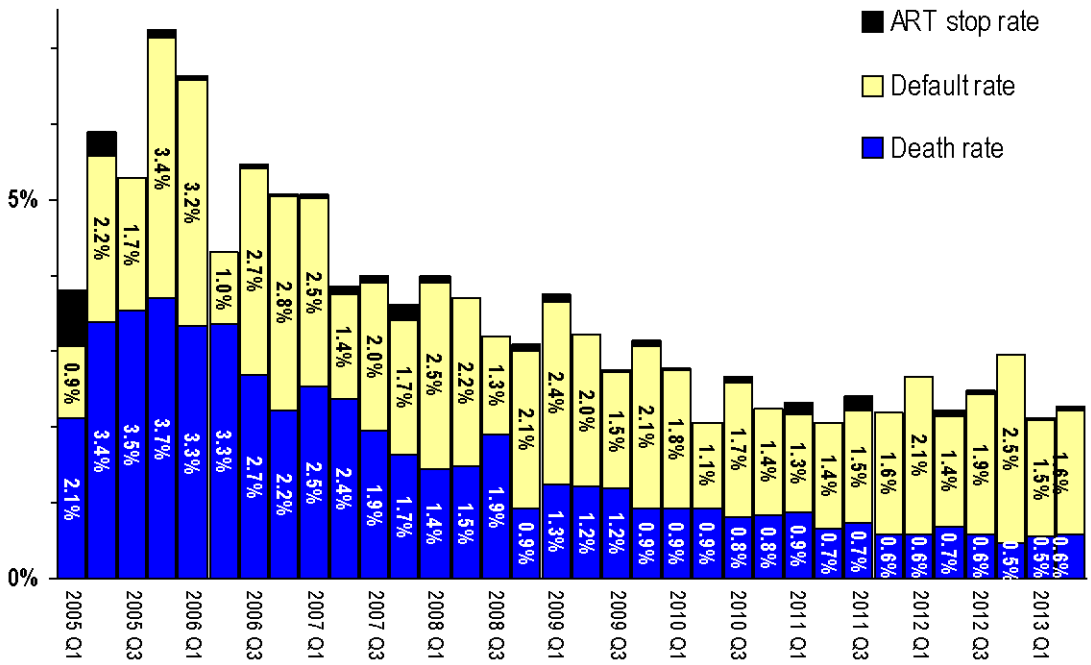


Figure 4 shows the considerable decrease of ART drop-out rates since the start of the national programme. There were **2,689** new deaths, **7,328** new defaulters, and **226** new ART stops in Q2 2013. This translates into a quarterly death rate of **0.6%** and a defaulter rate of **1.6%** among the 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 June 2013, a cumulative **62,231 (10%)** patients were known to have died **114,481 (18%)** were lost to follow-up and **2,510** (**<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)

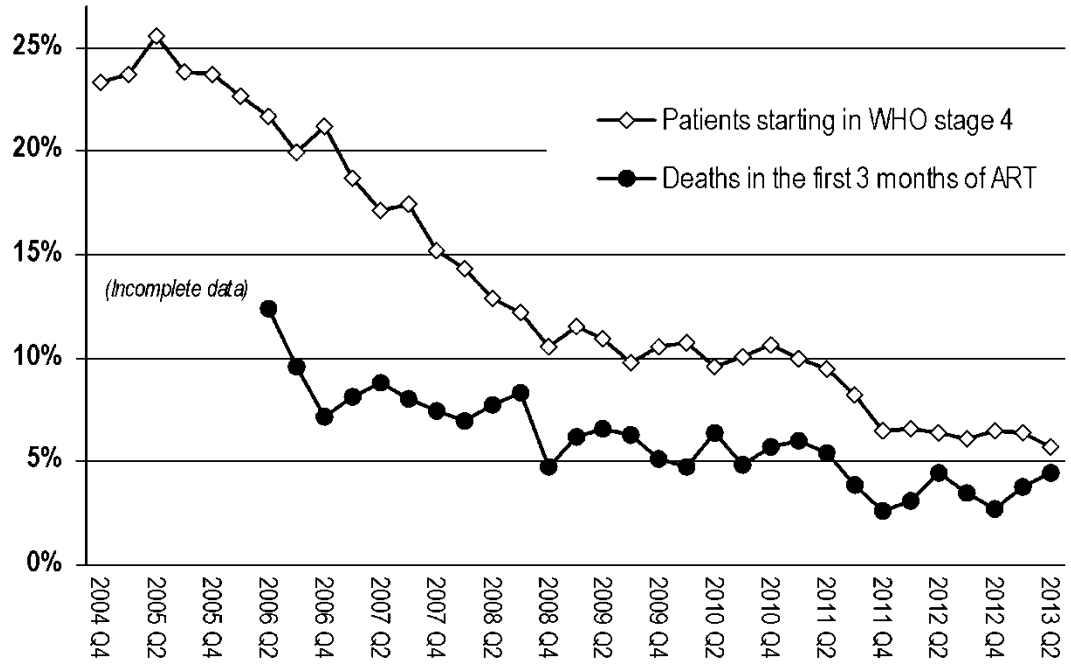
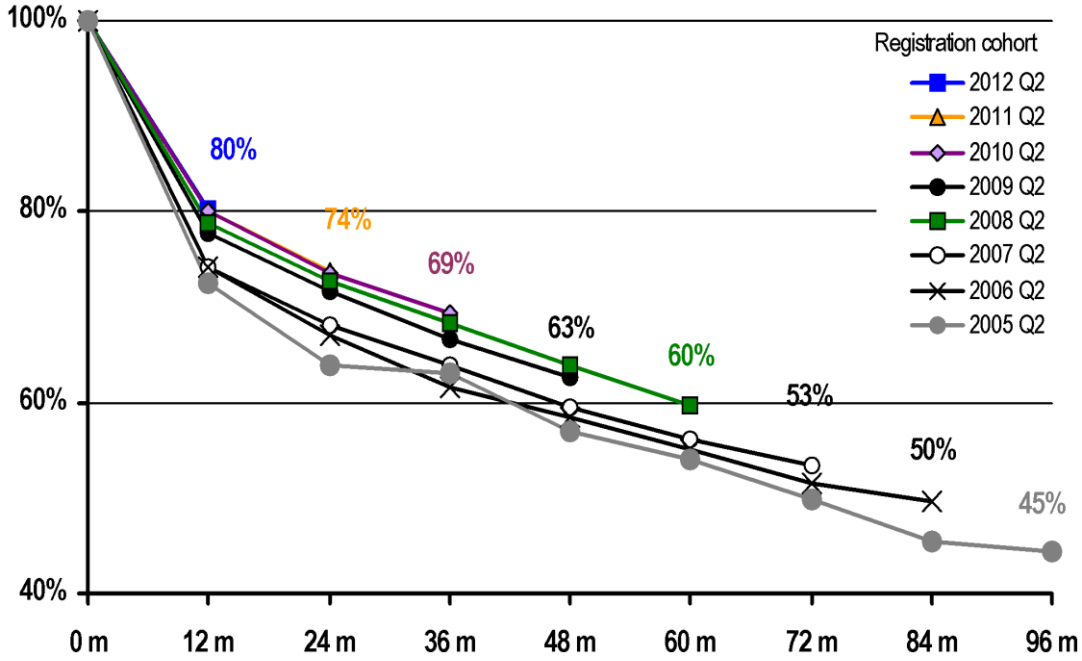


Figure 5 shows the considerable decline in **early mortality** since the start of the program. In Q2 of 2006 11% of new patients died within the first 3 months after ART initiation. There has been a remarkable decline in early mortality and the lowest point thus far was reached in Q4 2011. The decrease 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 Q2 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 Q2 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 Q2 2012. For the 5th time, a further subgroup analysis was done for women who started ART under ***Option B+*** during Q2 and Q4 2012. **80% of adults** and **82% 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. **60%** and **50%** 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 **8,295** (96%) of the 8,646 women registered as having started ART under *Option B+* in Q4 2012[5]. This number represents 586 (7%) women who transferred out and are therefore double counted and **7,709 (93%)** patients not transferred. **5,941 (77%)** of these were retained at 6 months after registration. **1,588 (90%)** of those not retained were lost to follow-up, **64 (4%)** were known to have stopped ART and **116 (7%)** were known to have died.

12-month group cohort survival outcomes were known for **8,255** (94%) out of the 8,792 women registered as having started ART under *Option B+* in Q2 2012.[5] This number represents **686 (8%)** women who transferred out and are therefore double counted and **7,569 (92%)** patients not transferred. **5,778 (76%)** of these were retained at 12 months after registration. **1,622 (91%)** of those not retained were lost to follow-up, **67 (4%)** were known to have stopped ART and **102 (6%)** 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+*.

[5] 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	8,295	100%
Transfers out (double counted)	586	7%
Total not transferred out (patients in cohort)	7,709	93%
Total alive on ART	5,941	77%
Total not retained	1,768	23%
Defaulted	1,588	90%
Stopped ART	64	4%
Died	116	7%

12 month survival OptionB+

Survival and retention in ART program *

ART cohort registration group outcomes

Total ART clinic registrations	8,255	100%
Transfers out (double counted)	686	8%
Total not transferred out (patients in cohort)	7,569	92%
Total alive on ART	5,778	76%
Total not retained	1,791	24%
Defaulted	1,622	91%
Stopped ART	67	4%
Died	102	6%

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

431,561 (99%) of patients were on first line and **3,108 (1%)** were on second line regimens; **441 (<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, **23,548 (5%)** were on paediatric formulations and **22,352 (95%)** of these were on the new standard first line for children (regimen 2P: AZT/3TC/NVP).

264,912 (65%) of **408,013** patients on adult formulation first line regimen were on regimen 1A (stavudine / lamivudine / nevirapine); **28,960 (7%)** were on regimen 2A (zidovudine / lamivudine / nevirapine), which is the main alternative regimen for patients with stavudine side-effects.

By the end of June 2013, **105,326 (26%)** of patients on adult first line were receiving regimen **5A** (tenofovir / lamivudine / efavirenz). The majority of these were new initiations under Option B+ or because of concurrent TB treatment. Only a minority were substituted to regimen 5A due to confirmed lipodystrophy or other severe ART side effects.

Adherence to ART

Pill counts and the number of missed doses were documented for **412,834 (95%)** out of all patients retained on ART and **371,945 (90%)** of these were classified as >95% adherent in Q2 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

361,061 (83%) patients on ART had information on drug side effects documented at their last clinic visit before end of June 2013. **24,973 (7%)** of these had side-effects. This may be under-ascertainment of the true rate of drug side effects, as an assumed 20-25% of patients develop at least mild side effects on regimen 1 (stavudine / lamivudine / nevirapine). However, 33% of patients on first line regimen adult formulation are no longer on stavudine containing regimens, so a lower proportion of patients with side-effects is plausible. Malawi continues to increase access to alternative first line regimens for such patients, and a full transition to regimen 5A (tenofovir / lamivudine / efavirenz) is planned from July 2013.

16.5 Viral Load (VL) Monitoring

The National Treatment Program has started rolling out routine VL monitoring for patients on ART to facilitate early detection of treatment failure and timely switching to second line ART. Routine VL monitoring is scheduled at 6 months after ART initiation, at 2 years and every 24 months thereafter. Additional targeted VL testing may be carried out for patients with clinically suspected treatment failure. During Q2 2013, **7** laboratories in the national program provided VL testing for patients enrolled at the 7 respective facilities and at 32 associated sites. A total of **12,002** VL results were produced and dispatched from these labs between April and June 2013.

Disaggregated data are available from Kamuzu Central Hospital and Thyolo District Hospital (MSF Belgium) labs: out of **3,943** total results produced (routine and targeted), **3,115 (79%)** had no detectable virus, 828 (21%) had detectable virus and 415 (11%) showed a VL ≥5,000 copies/ml. **3,394** (86%) of all results were from routine monitoring and 280 **(8%)** of these showed ≥5,000 copies/ml. Routine VL monitoring outputs are expected to increase significantly over the next quarters.

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

For the first time this quarter, STI reports were actively collected during the Integrated HIV Program Supervision exercise. 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 third of facilities did not use the STI register (or used it inconsistently), so the data presented in this report are thought to represent about 70% 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 **43,053** STI cases were treated in Q2 2013. Considering the 70% completeness of reporting, this number is estimated to represent a total of

61,500 STI cases treated. This is equivalent to **a 62% STI treatment coverage** of the expected 98,600 STI cases in the population.

Out of **43,053** documented clients treated, **17,081** (40%) were male and **25,972** (60%) were female. 3,441 (13%) of female STI clients were pregnant. **28,963** clients (67%) were 25 years and above, **9,477** (22%) were 20-24 years and **4,613** (11%) were under 20 years old.

18.2 Client Type and STI History

37,554 (87%) of clients were symptomatic and **5,499** (13%) were asymptomatic (treated as partners). Among symptomatic clients, **33,852** (90%) of were index cases and 3,701 (10%) were partners. A total of **13,258** partner notification slips were issued, equivalent to an average of 0.39 slips per index case. Considering the 13,258 partner notification slips issued, **69%** (9,201) of those notified presented to the clinic. **31,713** (74%) of clients presented with their first lifetime episode of STI, **7,745** (18%) clients reported to have had an STI in over three months ago and **3,595** (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 **20,205** (47%) clients and **6,168** (31%) of these were HIV positive. **1,113** (18%) of positives were identified through a new test initiated at the STI clinic, while **5,055** (82%) presented with a documented previous positive HIV test result. **3,546** (70%) 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 **14,363** (30%) cases, followed by urethral discharge (UD, **9,799** cases) and genital ulcers (GUD, **7,651** 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 **8,887** (24%) of the 36,885 STI clients with unknown or new negative test result were referred for repeat HTC. **717** (64%) of 1,113 clients who were newly tested HIV positive were referred for ART eligibility assessment.

19 Supply of HIV Program Commodities

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 Q2 2013 the CMST warehouse dedicated for HIV Program commodities received ARVs worth **$11,547,986** and drugs for management of opportunitic diseases and STIs worth **$2,519,120.**

These receipts included **878,160** tins of tenofovir/lamivudine/efavirenz 300/300/600mg (Regimen 5A), which is equivalent to **2.3** months of stock (MOS) based on consumption rates after full transition to regimen 5A. As of July 2013, **823,487** tins of regimen 5A were at the sites and **1,413,662** tins were at the warehouse, adding up to a total of **6** MOS. Additional orders have been confirmed for a total of **3.7 million** tins of regimen 5A with a total value of **$40.7 million**. Of these, **2.1 million** tins are expected to arrive in several consignments before the end of December 2013 and **1.7 million** tins are scheduled to arrive between January and March 2014.

The warehouse also received a total of **89.3 million** tablets (**6.3** MOS) of cotrimoxazole 960mg for cotrimoxazole preventive therapy (CPT). As of July 2013, a total of **82.9 million** tablets were in country (11 million at the sites; 71.9 million in the warehouse), which was equivalent to **5.9** MOS.

The scheduled quarterly distribution of HIV commodities (Round 13) reached the sites between 23rd April and 18th June 2013. A total of over **1,400m^2** of commodities were distributed to **658** sites. The table below shows the breakdown of commodities received by the sites for this distribution.

Commodity group	Tot. packs received	Tot. volume (m^2)
ARVs	1,749,428	843
OI drugs	949,114	495
Diagnostic tests	12,866	20
STI drugs	58,731	46
Stationery	2,450	
Family planning	7,666	

During Q2 2013, the logisitcs team at the Department for HIV and AIDS also coordinated a total of **1,456** commodity transactions between the sites to prevent stock ruptures and/or prevent expiries. This included **927** relocations of ARVs between sites.

Commodity group	Ad hoc allocations from wareh.	Relocation between sites
ARVs	186	927
Diagnostic tests	33	109
Family planning	1	4
OI drugs	79	35
Stationery	73	1
STI drugs	7	1

UNICEF is currently managing the distribution to sites using a third party distribution agent. This arrangement has been agreed up to end 2013. UNICEF has submitted a cost estimate and statement of account in August to ensure continuity of funding for subsequent distribution rounds.

After completion of distribution Round 13, the HIV Department Logistics Team conducted **34 site visits.** The purpose of this exercise was to improve storage and stock management at health facilities and to conduct quality assurance for the distribution round. Some of the challenges noted include: stock imbalances, poor stock management, limited knowledge of ARV formulations among Drug Store Clerks, inadequate documentation of logistics data, parallel inventory management systems and lack of stock assessment skills. However, compared with the previous quarter, the team noted a general improvement in stock management at the sites. Almost all of the staff at the

visited sites were now familiar with the toll-free phone lines for the Logistics Team and complied with system of obtaining authorization for stock relocations. No deviations from the documented delivery notes for Round 13 were noted at any of the visited sites.

Physical stock counts for ARVs and other HIV program commodities were performed at all 686 sites visited during the Integrated PMTCT/ART supervision in July 2013. **Table 6** shows the total medicine stocks found at the sites and the estimated consumption periods. Following the quarterly distribution cycle 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 November 2013.

According to the physical stock count, **575** facilities had stocks of Determine HIV tests, totalling **389,893** tests. This is equivalent to **2.8** MOS based on the reported rates of HIV testing this quarter. An additional **257,500** Determine HIV tests were in the warehouse (**1.9** MOS). However, it has been observed that HIV test kits that are kept at various testing locations at the sites may not be included in the physical stock count. It is likely that most of the sites documented as having no HIV test kits in stock had physical stock balances in their testing rooms.

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.

105,326 patients were on Regimen 5A, which exceeded the procurement projection for this quarter by 9,602 (10%). This was due to the fact that several sites, mainly in the urban areas and among the private sector, had started transitioning patients from regimen 1A to 5A prematurely. However, the available stocks for 5A in country are sufficient to sustain the national patient cohort in spite of this small deviation from the transition protocol.

Table 6: Total stocks of HIV program commodities at all sites visited during the 2013 Q2 supportive site supervision. Stock positions ar from the date of the visit (between 1-4 weeks after the end of the quarter). Warehouse stock positions are from 22/07/2013

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)	**33**	**1,753**	**9,352**	1,146	1.5	8.2
	ATV / r 300 / 100mg tins (30 tabs)	**85**	**5,917**	**9,731**	2,726	2.2	3.6
	AZT / 3TC / NVP 300 / 150 / 200mg tins (60 tabs	**558**	**67,271**	**101,969**	28,960	2.3	3.5
	AZT / 3TC / NVP 60 / 30 / 50mg tins (60 tabs)	**588**	**114,677**	**361,186**	55,880	2.1	6.5
	AZT / 3TC 300 / 150mg tins (60 tabs)	**565**	**11,679**	**9,862**	1,570	7.4	6.3
	AZT / 3TC 60 / 30mg tins (60 tabs)	**553**	**16,417**	**12,500**	1,894	8.7	6.6
	d4T / 3TC / NVP 30 / 150 / 200mg tins (60 tabs)	**487**	**231,178**	**49,189**	264,912	0.9	0.2
	d4T / 3TC / NVP 6 / 30 / 50mg tins (60 tabs)	**380**	**39,093**	**2,332**	1,873	20.9	1.2
	d4T / 3TC 30 / 150mg tins (60 tabs)	**544**	**34,739**	**1,208**	6,564	5.3	0.2
	d4T / 3TC 6 / 30mg tins (60 tabs)	**320**	**4,610**	**2,357**	435	10.6	5.4
	EFV 200mg tins (90 tabs)	**136**	**4,222**	**1,420**	163	25.9	8.7
	EFV 600mg tins (30 tabs)	**455**	**12,475**	**1,209**	7,572	1.6	0.2
	LPV / r 100 / 25mg tins (60 tabs)	**32**	**2,184**	**7,285**	1,146	1.9	6.4
	LPV / r 200 / 50mg tins (120 tabs)	**58**	**2,112**		2,726	0.8	
	NVP 200mg tins (60 tabs)	**485**	**15,748**	**11,064**	1,243	12.7	8.9
	TDF / 3TC / EFV 300 / 300 / 600mg tins (30 tabs)	**664**	**823,487**	**1,413,662**	105,326	7.8	13.4
	TDF / 3TC 300 / 300mg tins (30 tabs)	**494**	**18,480**	**18,129**	3,639	5.1	5.0
bottles	Fluconazole (Diflucan) 50mg / 5ml bottles (35 ml)	**88**	**2,648**	**347**	9	305.5	40.0
	Gentian violet 25g bottles (1 each)	**511**	**9,144**	**7,314**			
	NVP 10mg/ml bottles (25 ml)	**573**	**96,658**	**6,697**	14,450	6.7	0.5
vials	Benzathine Penicillin 1.44g vials (50 each)	**573**	**196,405**	**97,100**			
	Bleomycine 15,000IU vials (1 each)	**20**	**2,098**	**80**			
	Ceftriaxone 1g vials (50 each)	**487**	**84,072**				
	Depo-Provera 150mg/1ml vials (25 each)	**536**	**1,000,497**	**425,050**	43,402	23.1	9.8
	Gentamicin 80mg / 2ml vials (50 each)	**521**	**297,367**				
	Vincristine 1mg / 1ml vials (1 each)	**52**	**20,413**	**89,100**			
tabs	Aciclovir 200mg blist packs (25 tabs)	**556**	**3,392,070**	**5,300,300**			
	Aciclovir 400mg blist packs (500 tabs)	**78**	**478,377**	**1,750,000**			
	Amitriptylline 25mg tins (500 tabs)	**206**	**368,241**	**1,323,000**			
	Azithromycin 500mg blist packs (3 tabs)	**321**	**45,045**	**2,574**			
	Ciprofloxacin 500mg blist packs (100 tabs)	**313**	**1,315,801**				
	Clotrimazole 500mg boxes (1 each)	**605**	**149,356**	**15,230**			
	Codeine 30mg tins (100 tabs)	**43**	**350,283**	**404,300**			
	Cotrimoxazole 100 / 20mg blist packs (1000 tabs)	**563**	**12,602,681**	**43,674,000**	3,497,107	3.6	12.5
	Cotrimoxazole 400 / 80mg blist packs (60 tabs)	**446**	**16,767,686**	**3,332,760**	28,355,653	0.6	0.1
	Cotrimoxazole 400 / 80mg tins (1000 tabs)	**498**	**28,045,229**	**45,979,000**			
	Cotrimoxazole 960mg blist packs (1000 tabs)	**302**	**10,997,752**	**71,886,000**	14,177,826	0.8	5.1
	Doxycycline 100mg tins (1000 tabs)	**560**	**26,056,400**	**5,198,000**			
	Erythromycin 250mg tins (1000 tabs)	**582**	**13,232,193**	**6,730,000**			
	Fluconazole (Diflucan) 200mg tins (28 tabs)	**535**	**537,842**		53,915	10.0	
	Fluconazole (generic) 200mg tins (100 tabs)	**48**	**129,992**	**238,500**			
	Ibuprofen 200mg tins (1000 tabs)	**406**	**1,766,809**	**135,000**			
	Isoniazid 100mg blist packs (100 tabs)	**239**	**240,152**				
	Isoniazid 300mg blist packs (672 tabs)	**419**	**2,625,334**		1,257,213	2.1	
	Metronidazole 200mg tins (1000 tabs)	**588**	**12,206,711**	**4,666,000**			
	Morphine 10mg blist packs (60 tabs)	**22**	**184,598**	**1,067,340**			
	Pyridoxine 25mg tins (100 tabs)	**269**	**1,297,213**	**38,600**			

Table 6: Total stocks of HIV program commodities at all sites visited during the 2013 Q2 supportive site supervision. Stock positions ar from the date of the visit (between 1-4 weeks after the end of the quarter). Warehouse stock positions are from 22/07/2013

Inventory unit	Item	Sites with any Stock	Total Physical Stock		Consump-tion/ Month	Months of Stock *	
			At Sites	In Warehouse		At Sites	Wareh.
sheets	ART pat. card adult (yellow) bundles (100 sheets	**635**	**293,712**	**204,300**	10,302	28.5	19.8
	ART pat. card paed. (blue) bundles (100 sheets)	**614**	**102,484**	**20,300**	903	113.5	22.5
	Exposed child card (pink) bundles (100 sheets)	**598**	**71,516**		3,295	21.7	
	Polythene sleeve bundles (100 sheets)	**375**	**68,267**	**89,000**			
	Pre-ART pat. card (green) bundles (100 sheets)	**622**	**137,001**	**65,800**	3,426	40.0	19.2
tests	DBS kit (filter paper, lancet, etc.) bundles (20 ea	**320**	**17,441**				
	Determine HIV1/2 boxes (100 each)	**575**	**389,893**	**257,500**	137,441	2.8	1.9
	Determine syphilis boxes (100 each)	**84**	**82,784**		49,146	1.7	
	Uni-Gold HIV1/2 boxes (20 each)	**607**	**118,490**	**106,880**	13,963	8.5	7.7
pieces	Condoms female boxes (1 each)	**349**	**701,901**				
	Condoms male boxes (1 each)	**362**	**6,225,634**				

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

20 Training and Mentoring

20.1 HIV Testing and Counselling, Early Infant Diagnosis

2,533 HTC providers were re-trained using the HTC Skills Intensive Training curriculum.

About **300** staff (mainly HSAs) at **52** facilities received mentoring for collection of dried blood samples for Early Infant Diagnosis and documentation of results.

20.2 PMTCT/ART

112 medical staff were newly trained and certified in PMTCT/ART this quarter. This brings the total number trained in the 2011 guidelines to **5,823**.

35 Participants from the South East Zone attended a Clinical Review Meeting for the HIV Programs (funded by I-TECH Malawi). 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 practicing. 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.

- Low paediatric ART uptake through early infant diagnosis (DNA-PCR), presumed severe HIV disease and universal treatment among children aged 12-23 months. Some of these shortfalls were attributed to competing responsibilities for HSAs who are supposed to provide most of the EID testing. Other reasons include the low health worker confidence with paediatric HIV.

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

20.3 HIV Clinical Mentoring Program

Mentoring reports remained incomplete this quarter and only 4 Districts (Chitipa, Mzimba North, Zomba, Neno) submitted their data. A total of **61** staff at **46** sites in these districts received mentoring during a total of **90** mentoring visits.

21 Participants in Q1 2013 Supervision (Site visits 15 Apr – 3 May 2013)

Richard Abuduo (CO, MOH)
Annie Biza (Nurse, Army)
Lincy Chalunda (CO, MOH)
M V Cheonga (Nurse, MOH)
Janet Chikonda (Nurse, MOH)
Grace Chipanga (Nurse, Private)
Zengani Chirwa (TA, MOH, Department of HIV and AIDS)
Stuart Chuka (CO, MBCA)
Ruth Deula (Nurse, CHAM)
Peter Donda (CO, Dedza DH)
Michael Eliya (PMTCT Program Officer, MOH)
Suleiman Ibrahim (HIV Supervisor, Central West Zone Office)
John Kabichi (CO, MOH)
Lilian Kachali (Nurse, MOH)
Limbani Kadzuwa (Nurse, MOH)
Eviness Kafumbi (, Private)
Vera Kajawo (Nurse, MOH)
Mike Kalulu (CO, MOH)
Mathilda Kamanga (Nurse, Army)
Rehema Kansonkho (Nurse, MOH)
Oscar Kasiyamphanje (Nurse, CHAM)
Joseph Kasola (CO, MOH, Chitipa DH)
Catherine Kassam (, MOH)
Rodrick Kaulele (CO, CHAM (Sister Tereza))
Absalom Kaunda (CO, MOH, Mzimba DHO)
Jean Kayamba (Nurse, MOH)
Jesse Lobeni (Nurse, MOH)
Prospere Lutala (HIV Zonal Supervisor, MOH, UNV)
Chikayiko Majamanda (Nurse, MOH)
Ezra Majoni (Nurse, MOH)
Mercy Makaika (Nurse, MOH)
Simon Makombe (ART officer, MOH, Dept. for HIV and AIDS)
Amos Makwaya (CO, MOH)
Frazer Mkawa (Nurse, MOH)
Christopher Mkwezalamba (CO, MOH)
Offrey Mnduwira (CO, Police)
Moreen Mtambo (PMTCT, MOH)
Andraida Mtoseni (Nurse, MOH)
Ekwala Mubiala (HIV Zonal Supervisor, MOH, UNV)
Ruockia Mwachumu (Nurse, MOH Nsanje DHO)
Austins Namondwe (CO, CHAM)
Stanley Ngoma (CO, MOH)
Joseph Njala (HIV fellow, MOH, Department of HIV and AIDS)
Grace Juma Nkhata (Nurse, MOH)
Angela Nkhoma (Nurse, MOH)
Melenia Nkhoma (Logistics Fellow, MOH)
Mourine Gumbo Ntambo (Nurse, MOH)
Judith Ntopa (Nurse, Army)
Sabina Phiri (Nurse, MOH)
Jacob Phulusa (CO, UNC Project)
Macleod Piringu (ART CORDINATOR, MOH)
George Sankhulani (CO, Dignitas)
Monica Simfukwe (Nurse, MOH, Chintheche RH)
Juliana Soko (ARV nurse, MOH, Livingstonia MH)
Mark Suzumire (CO, MOH)
Elizabeth Tamula (Nurse, Baylor)
Nyanyiwe Tembo (Nurse, MOH)
Gerald Zomba (HIV Fellow, MOH)

Report compiled by:
Frank Chimbwandira (MO/Head of Dept. for HIV and AIDS)
Austin Mnthambala (MO/Deputy of Dept. for HIV and AIDS
Simon Makombe (ART Officer, Dept. for HIV and AIDS)
Eustice Mhango (ART Officer, Dept. for HIV and AIDS)
Michael Eliya (PMTCT Officer, Dept. for HIV and AIDS)
Dalitso Midiani (PMTCT Officer, Dept. for HIV and AIDS)
Mtemwa Nyangulu (HTC Officer, Dept. for HIV and AIDS)
Lucius Ng'omang'oma (HTC Officer, Dept. for HIV and AIDS)
Amon Nkhata (STI Officer, Dept. for HIV and AIDS)
Andreas Jahn (MO/TA, Dept. for HIV and AIDS)
Zengani Chirwa (MO/TA, MOH, Dept. of HIV and AIDS)
Caroline Ntale (TA Logistics, MOH, Dept of HIV and AIDS)
Andrew Mganga (M&E Fellow, Dept. for HIV and AIDS)
Gerald Zomba (Clin. HIV Fellow, Dept. for HIV and AIDS)
Chimwemwe Mkandawire (IT Fellow, Dept. for HIV and AIDS)
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.

27th September 2013

22 Appendix (Full National HIV Program Data)

2013 Q1 HTC Report

			National coverage	
			Population denominator	
Total Number of Clients	**462,334**		3,772,503	**12%**
Gender and Pregnancy				
Males	151,760	33%	1,891,196	**8%**
Females	310,574	67%	1,881,306	**17%**
Females Non Pregnant	155,991	50%	1,274,306	**12%**
Females Pregnant	154,583	50%	151,750	**102%**
Age				
25 years and above	248,108	54%	1,256,106	**20%**
15 - 24 years	185,125	40%	789,500	**23%**
Children Below 15	29,101	6%	872,055	**3%**
18months - 14 years	22,193	76%	41,215	**54%**
Below 18months	6,908	24%	830,840	**1%**
HIV Test History				
Previously tested	305,459	66%		
Never tested before	156,875	34%		
Number of people ever tested since 2007	4,685,670			
Counselling Type				
Counseled with partner	92,035	20%		
Counseled alone	370,299	80%		
HIV Test Resuts				
Single test negative	423,017	91%		
First and second test negative	147	0%		
First and second test positive	37,651	8%		
First and second test discordant	1,519	0%		
Final Result				
No of children <18months with antibody positive	760	0.2%		
Positive	37,852	8.2%		
Negative	422,262	91.3%		
Inconclusive	1,460	0.3%		

Blood safety

Malawi (national)

2013 Q2 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Infect. disease screening among potential donors

*

HIV screening

HIV testing not done		1,119	16%
Tested for HIV		5,789	84%
	HIV negative	5,356	93%
	HIV positive	433	7%

Hepatitis B screening

HepB testing not done		1,173	17%
Tested for Hepatitis B		5,735	83%
	HepB Negative	5,457	95%
	HepB Positive	278	5%

Hepatitis C screening

HepC testing not done		5,655	82%
Tested for Hepatitis C		1,253	18%
	HepC Negative	1,243	99%
	HepC Positive	10	1%

Syphilis screening

Syphilis testing not done		1,231	18%
Tested for Syphilis		5,677	82%
	Syphilis Negative	5,513	97%
	Syphilis Positive	164	3%

Malaria screening

Malaria testing not done		4,493	65%
Tested for malaria		2,415	35%
	Malaria Negative	2,225	92%
	Malaria Positive	190	8%

Summary screening outcome

Not donated		2,209	32%
Donated		4,699	68%
	Screened for at least HIV, HepB and syphilis	4,320	92%
		Screened for HIV, HepB, HepC, Syphilis, Malaria	611	14%
		Screened for HIV, HepB, Syphilis	3,709	86%
	Screened for HIV, HepB	5	0%
	Screened for HIV only	19	0%
	Screened with any other combination of tests	355	8%

* Subgroups may not add to 100% due to rounding

HIV Care Clinic (HCC) cohort analysis

Malawi (national)

2013 Q2 (Quarter)

Registration details

*

HCC clinic registrations

Total HCC registrations	20,163	100%

Registration type

Patients enrolled first time	19,316	96%
Patients re-enrolled	63	0%
Patients transferred in	784	4%

Sex

Males (all ages)	9,114	45%
Females (all ages)	11,049	55%
Non-pregnant	11,027	100%
Pregnant	22	0%

Age at registration

Adults 15+ yrs	9,418	47%
Children 0-14 yrs	10,745	53%
Children 24 months - 14 years	881	8%
Children below 24 months (exposed children)	9,864	92%
Children 2 - below 24 months	4,838	49%
Infants below 2 months	5,026	51%

Reason for HCC registration

Exposed infants	9,886	49%
Confirmed infected patients (pre-ART)	10,277	51%

* Subgroups may not add to 100% due to rounding

HIV Care Clinic (HCC) cohort analysis

Malawi (national)

2013 Q2 (Cumulative)

Registration details

*

HCC clinic registrations

Total HCC registrations	220,413	100%

Registration type

Patients enrolled first time	213,432	97%
Patients re-enrolled	634	0%
Patients transferred in	6,347	3%

Sex

Males (all ages)	89,391	41%
Females (all ages)	131,022	59%
Non-pregnant	126,120	96%
Pregnant	4,902	4%

Age at registration

Adults 15+ yrs	127,991	58%
Children 0-14 yrs	92,422	42%
Children 24 months - 14 years	11,894	13%
Children below 24 months (exposed children)	80,528	87%
Children 2 - below 24 months	46,022	57%
Infants below 2 months	34,506	43%

Reason for HCC registration

Exposed infants	79,773	36%
Confirmed infected patients (pre-ART)	140,640	64%

Pre-ART follow-up outcome

*

Primary follow-up outcomes

Total retained in pre-ART	47,129	34%
Started ART	59,429	43%
Defaulted	28,790	21%
Died	1,620	1%

Transfers between sites

Total not transferred out	136,839	97%
Transferred out	3,801	3%

* Subgroups may not add to 100% due to rounding

HIV exposed child follow-up

Malawi (national)

2013 Q2 (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	6,691	100%

CPT status

On CPT	5,617	84%
Not on CPT	1,074	16%

HIV status

Current HIV infection status unknown	4,912	73%
HIV infection not confirmed, not ART eligible	4,897	100%
HIV infection not confirmed, ART eligible (PSHD)	15	0%
Current HIV infection status known	1,779	27%
Confirmed not infected	1,730	97%
Confirmed infected (ART eligible)	49	3%

ART eligibility summary

Not eligible for ART	6,627	99%
ART eligible	64	1%
ART not initiated	21	33%
Initiated ART	43	67%

Primary follow-up outcome

Discharged uninfected	17	0%
Continue follow-up	6,007	90%
Started ART	43	1%
Defaulted	552	8%
Died	20	0%

Transfers between sites

Total not transferred out	6,639	99%
Transferred out	52	1%

Age 12 months

Age cohort outcomes

*

Total children in birth cohort

Total children registered	6,784	100%

CPT status

On CPT	4,665	69%
Not on CPT	2,119	31%

HIV status

Current HIV infection status unknown	4,952	73%
HIV infection not confirmed, not ART eligible	4,915	99%
HIV infection not confirmed, ART eligible (PSHD)	37	1%
Current HIV infection status known	1,832	27%
Confirmed not infected	1,706	93%
Confirmed infected (ART eligible)	126	7%

* Subgroups may not add to 100% due to rounding

Age cohort outcomes *

ART eligibility summary

Not eligible for ART		6,621	98%
ART eligible		163	2%
	ART not initiated	59	36%
	Initiated ART	104	64%

Primary follow-up outcome

Discharged uninfected	50	1%
Continue follow-up	4,628	70%
Started ART	104	2%
Defaulted	1,822	27%
Died	54	1%

Transfers between sites

Total not transferred out	6,658	98%
Transferred out	126	2%

Age 24 months

Age cohort outcomes *

Total children in birth cohort

Total children registered	3,478	100%

CPT status

On CPT	1,420	41%
Not on CPT	2,058	59%

HIV status

Current HIV infection status unknown		1,995	57%
	HIV infection not confirmed, not ART eligible	1,951	98%
	HIV infection not confirmed, ART eligible (PSHD)	44	2%
Current HIV infection status known		1,483	43%
	Confirmed not infected	1,335	90%
	Confirmed infected (ART eligible)	148	10%

ART eligibility summary

Not eligible for ART		3,286	94%
ART eligible		192	6%
	ART not initiated	48	25%
	Initiated ART	144	75%

Primary follow-up outcome

Discharged uninfected	1,168	34%
Continue follow-up	693	20%
Started ART	144	4%
Defaulted	1,369	40%
Died	51	1%

Transfers between sites

Total not transferred out	3,425	98%
Transferred out	53	2%

Antenatal Care

Malawi (national)

2013 Q2 (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	163,995	100%

ANC cohort analysis *

Total women completing ANC in the reporting period

Total women in booking cohort	147,586	100%

Visits per woman

Women with 1 visit	35,496	24%
Women with 2 visits	41,191	28%
Women with 3 visits	42,006	28%
Women with 4 visits	23,396	16%
Women with 5+ visits	5,497	4%

Trimester of first visit

Started ANC 0-12 wks	12,981	9%
Started ANC 13+ wks	134,605	91%

Pre-eclampsia

No pre-eclampsia	145,573	99%
Pre-eclampsia	2,013	1%

TTV doses

0-1 TTV doses	68,399	46%
2+ TTV doses	79,187	54%

SP tablets

0 SP doses	15,286	10%
1 SP dose (1 x 3 tabs)	46,196	31%
6+ SP tablets (2 x 3 tabs)	86,104	58%

FeFo tablets

0-119 FeFo tablets	113,698	77%
120+ FeFo tablets	33,888	23%

Albendazole (Deworming)

0 Albend. doses	34,598	23%
1 Albend. dose	113,687	77%

ITN (bednets)

No ITN	38,260	26%
ITN received	108,551	74%

Syphilis status

Not tested for syphilis		127,132	86%
Tested for syphilis		20,454	14%
	Syphilis negative	19,638	96%
	Syphilis positive	816	4%

* Subgroups may not add to 100% due to rounding

Antenatal Care

Malawi (national)

2013 Q2 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

ANC cohort analysis

*

HIV status ascertainment

HIV status not ascertained	34,525	23%
HIV status ascertained	113,061	77%
Valid previous test result	9,150	8%
Previous negative	5,669	62%
Previous positive	3,481	38%
New test at ANC	103,911	92%
New negative	98,110	94%
New positive	5,801	6%

HIV status summary

Total women HIV negative	103,779	92%
Total women HIV positive	9,282	8%

CPT status (among HIV pos)

Not on CPT	1,474	16%
On CPT	7,808	84%

Final PMTCT regimen mother

No ARVs	1,188	13%
Any ARVs	8,094	87%
ART (by time of initiation)	8,094	100%
Already on ART when starting ANC	2,860	35%
Started ART at 0-27 weeks of pregnancy	3,799	47%
Started ART at 28+ weeks of preg.	1,435	18%

Baby's ARVs dispensed

No ARVs dispensed for infant	3,391	37%
ARVs dispensed for infant	5,891	63%

* Subgroups may not add to 100% due to rounding

Maternity

Malawi (national)

2013 Q2 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternal details

*

Admissions in the reporting period

Total admissions (referrals double-counted)	118,402	100%
Not referred to other site (total women)	111,869	94%
Referred out before delivery (multiple admissions)	6,533	6%

HIV status ascertainment

HIV status not ascertained	9,130	8%
HIV status ascertained	108,861	92%
Valid previous test result	105,081	97%
Previous negative	97,147	92%
Previous positive	7,934	8%
New test at maternity	3,780	3%
New negative	3,429	91%
New positive	351	9%

HIV status summary

Total women HIV negative	100,576	92%
Total women HIV positive	8,285	8%

ARVs during pregnancy (among HIV pos)

No ARV in pregnancy	380	5%
Any ARVs	7,905	95%
ART (by time of initiation)	7,905	100%
ART initiated before pregnancy	4,343	55%
ART initiated in 1st / 2nd trimester	1,433	18%
ART initiated in 3rd trimester	1,752	22%
ART initiated during labour	377	5%

Obstetric complications

No obstetric complications	103,598	88%
Any obstetric complications	14,393	12%
Haemorrhage	2,319	16%
Haemorrhage ante-partum	615	27%
Haemorrhage post-partum	1,704	73%
Obstr / prol labour	4,948	34%
(pre-) Eclampsia	732	5%
Maternal sepsis	160	1%
Ruptured uterus	121	1%
Other obstetric complications	6,113	42%

Emergency obstetric care

Oxytocin	91,360	94%
Anticonvulsive	841	1%
Antibiotics	3,984	4%
Blood transfusion	510	1%
Manual removal of placenta	421	0%

Vitamin A

Vit A not given	47,297	40%
Vit A given	70,694	60%

* Subgroups may not add to 100% due to rounding

Maternity

Malawi (national)

2013 Q2 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternal details

*

Staff conducting delivery

Category A: MO, CO, nurse/midwife, MA	105,818	95%
Category B: PA, WA, HSA	991	1%
Category C: Other	4,649	4%

Mother survival

Mother alive	111,251	100%
Mother died	207	0%

Infant details

*

Single babies / multiple deliveries

Total babies delivered	113,688	100%
Single babies	109,236	96%
Twin / multiple babies	4,452	4%

Delivery place

Total deliveries at a health facility	108,761	96%
This facility	108,415	100%
Other facility	346	0%
Total deliveries before reaching the facility	4,927	4%
In transit	2,994	61%
Home / TBA	1,933	39%

Delivery mode

Spontaneous vaginal	102,753	90%
Vacuum extraction	1,419	1%
Breech	2,162	2%
Caesarean section	7,354	6%

Infant complications

No infant complications	100,286	88%
Total infants with complications	13,402	12%
Prematurity	3,356	25%
Weight less 2500g	4,665	35%
Asphyxia	3,263	24%
Sepsis	606	5%
Other newborn complication	1,512	11%

Infant survival

Total live births	111,802	98%
Discharged alive	110,697	99%
Neonatal deaths	1,105	1%
Stillbirths	1,886	2%
Stillbirth, fresh	1,029	55%
Stillbirth, macerated	857	45%

* Subgroups may not add to 100% due to rounding

Maternity

Malawi (national)

2013 Q2 (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	7,817	7%
Infants with known HIV exposure status	102,880	93%
Not HIV exposed	95,360	93%
HIV exposed	7,520	7%
Received no ARVs	515	7%
Received ARVs	7,005	93%
Nevirapine	7,005	100%

Breastfeeding initiated

BF not started within 60min	8,673	8%
BF started within 60min	105,015	92%

Tetracycline eye ointment given

TO not given	25,977	23%
TO given	87,711	77%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2013 Q2 (Quarter)

Registration details

*

ART clinic registrations

Total ART clinic registrations	33,615	100%

Registration type

First time ART initiations (total patients)	26,802	80%
ART re-initiations	435	1%
ART transfers in	6,378	19%

Sex

Males	11,318	34%
Females	22,297	66%
Non-pregnant	15,188	68%
Pregnant	7,109	32%

Age at ART initiation

Adults 15+ yrs	30,905	92%
Children 0-14 yrs	2,710	8%
Children 2-14 yrs	1,958	72%
Children below 24 mths	752	28%

Reason for starting ART

Presumed severe HIV Disease	156	0%
Confirmed HIV infection	33,459	100%
WHO stage 1 or 2	18,746	56%
Total lymphocytes <threshold	14	0%
CD4 below threshold	9,221	49%
CD4 unknown or >threshold	9,511	51%
PCR infants	158	2%
Children 12-23 mths	279	3%
Pregnant women	6,910	73%
Breastfeeding mothers	2,164	23%
WHO stage 3	12,321	37%
WHO stage 4	1,931	6%
Unknown / reason outside of guidelines	461	1%

TB at ART initiation

Never TB / TB > 24 months ago	32,071	95%
TB within the last 24 months	492	1%
Current episode of TB	1,052	3%

Kaposi's sarcoma at ART initiation

No KS	33,166	99%
Patients with KS	449	1%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2013 Q2 (Cumulative)

Registration details

*

ART clinic registrations

Total ART clinic registrations	759,391	100%

Registration type

First time ART initiations (total patients)	615,646	81%
ART re-initiations	6,797	1%
ART transfers in	136,948	18%

Sex

Males	275,318	36%
Females	484,073	64%
Non-pregnant	415,158	86%
Pregnant	68,915	14%

Age at ART initiation

Adults 15+ yrs	690,774	91%
Children 0-14 yrs	68,617	9%
Children 2-14 yrs	52,518	77%
Children below 24 mths	16,099	23%

Reason for starting ART

Presumed severe HIV Disease	2,800	0%
Confirmed HIV infection	756,591	100%
WHO stage 1 or 2	279,530	37%
Total lymphocytes <threshold	307	0%
CD4 below threshold	199,673	71%
CD4 unknown or >threshold	79,550	28%
PCR infants	2,149	3%
Children 12-23 mths	2,427	3%
Pregnant women	50,682	64%
Breastfeeding mothers	24,292	31%
WHO stage 3	384,285	51%
WHO stage 4	86,167	11%
Unknown / reason outside of guidelines	6,609	1%

TB at ART initiation

Never TB / TB > 24 months ago	694,643	91%
TB within the last 24 months	36,520	5%
Current episode of TB	28,228	4%

Kaposi's sarcoma at ART initiation

No KS	742,082	98%
Patients with KS	17,309	2%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2013 Q2 (Cumulative)

ART outcomes

*

Primary follow-up outcomes

Total alive on ART	443,221	71%
Alive on ART at site of last registration	435,110	98%
ART patients in transit between sites	8,111	2%
Defaulted	114,481	18%
Stopped ART	2,510	0%
Total died	62,231	10%
Died month 1	16,586	27%
Died month 2	10,707	17%
Died month 3	6,146	10%
Died month 4+	28,792	46%

Transfers between sites

Total not transferred out	614,332	81%
Transferred out	145,059	19%

ART regimens

First line regimens	431,561	99%
Adult formulation	408,013	95%
Regimen 1A	264,912	65%
Regimen 2A	28,960	7%
Regimen 3A	6,564	2%
Regimen 4A	1,008	0%
Regimen 5A	105,326	26%
Regimen 6A	1,243	0%
Paed. formulation	23,548	5%
Regimen 1P	749	3%
Regimen 2P	22,352	95%
Regimen 3P	157	1%
Regimen 4P	290	1%
Second line regimens	3,108	1%
Adult formulation	2,726	88%
Regimen 7A	2,396	88%
Regimen 8A	330	12%
Paed. Formulation	382	12%
Regimen 9P	382	100%
Other regimen (adult / paed)	441	0%

Adherence

Adherence unknown (not recorded)	22,276	5%
Adherence recorded	412,834	95%
0-6 doses missed	371,945	90%
7+ doses missed	40,889	10%

ART side effects

Side effects unknown (not recorded)	74,049	17%
Side effects recorded	361,061	83%
No side effects	336,088	93%
Any side effects	24,973	7%

* Subgroups may not add to 100% due to rounding

ART cohort analysis

Malawi (national)

2013 Q2 (Cumulative)

ART outcomes

*

Current TB status among ART patients (ICF)

ICF not done (Current TB status unknown/ not circ)	27,795	6%
ICF done	407,315	94%
TB not suspected	402,392	99%
TB suspected	3,054	1%
TB confirmed	1,869	0%
TB confirmed, not on treatment	316	17%
TB confirmed, on TB treatment	1,553	83%

* Subgroups may not add to 100% due to rounding

STI site report

Malawi (national)

2013 Q2 (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		43,053	100%
	Index patients treated (symptomatic)	33,852	79%
	Partners treated	9,201	21%

Sex

Males		17,081	40%
Females		25,972	60%
	Non-pregnant	22,531	87%
	Pregnant	3,441	13%

Age group

Age group A (0-19 years)		4,613	11%
Age group B (20-24 years)		9,477	22%
Age group C (25+ years)		28,963	67%

Client type

Symptomatic cases		37,554	87%
	Index cases	33,852	90%
	Partners symptomatic	3,702	10%
Partners asymptomatic		5,499	13%

STI treatment history

Never treated for STI		31,713	74%
Previously treated for STI		11,340	26%
	Old >3 months ago	7,745	68%
	Recent ≤3 months ago	3,595	32%

STI syndromic diagnosis

GUD		7,651	16%
UD		9,799	20%
AVD		14,363	30%
	Low risk	5,675	40%
	High risk	8,688	60%
LAP		7,117	15%
SS		850	2%
BU		679	1%
BA		1,029	2%
NC		420	1%
Genital Warts		702	1%
Syphilis RPR VDRL		1,442	3%
Other STI		4,315	9%

STI partner notification

Total partner notification slips issued		13,258	100%
	Total partners returned	9,201	69%
	Total partners not seen	4,057	31%

* Subgroups may not add to 100% due to rounding

STI site report

Malawi (national)

2013 Q2 (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	22,848	53%
HIV status ascertained	20,205	47%
HIV negative (new test)	14,037	69%
HIV positive	6,168	31%
New positive	1,113	18%
Previous positive	5,055	82%
Not on ART	1,509	30%
On ART	3,546	70%

STI clients referred for services

Lab	696	6%
Gynae review	380	3%
Surgical review	200	2%
Repeat HTC	8,887	75%
ART (for assessment)	717	6%
PMTCT	66	1%
Other (service referrals)	844	7%

* Subgroups may not add to 100% due to rounding