

ART IN THE PUBLIC AND PRIVATE SECTORS IN MALAWI RESULTS UP TO 30th SEPTEMBER, 2007

Executive Summary:

Public sector:

By the end of September 2007, there were **109** facilities in Malawi in the public health sector delivering ART free of charge to HIV-positive eligible patients.

In the third quarter of 2007 (July to September), there were **15,363** new patients started on ART (39% male, 61% female; 86% adults and 14% children). By the end of September 2007, there were **125,610** patients who had ever started on ART (39% male, 61% female; 92% adults and 8% children). Cumulative treatment outcomes by end of September were:- 69% alive and on ART at the site of registration, 12% dead, 10% lost to follow-up, 9% transferred out to another facility (and were presumably alive) and <1% stopped treatment. Of the 86,279 patients alive and on ART:- 96% were on the first line regimen, 4% were on an alternative first line regimen and a small number (265) were on a second line regimen.

Private sector:

By the end of September 2007, there were **45** facilities in Malawi in the private health sector delivering ART at a subsidised rate to HIV-positive eligible patients.

In the third quarter of 2007 (July to September), there were **565** new patients started on ART (55% male, 45% female, 97% adult, 3% children). By the end of September 2007, there were **4,878** patients who had ever started on ART (52% male, 48% female, 96% adults, 4% children). Cumulative treatment outcomes by end of September were:- 75% alive and on ART at the site of registration, 7% dead, 4% lost to follow-up, 13% transferred out to another facility (and were presumably alive) and <1% had stopped treatment. Of the 3,677 patients alive and on ART:- 93% were on first line regimen, 6% were on an alternative first line regimen and 1% were on a second line regimen.

Resume from January 2003 to September 2007 in the public and private sector:

	By Dec 2003	By Dec 2004	By Dec 2005	By Dec 2006	By Sep 2007
<i>Public sector ART sites</i>	9	24	60	103	109
New patients started ART in year	No data	10,183	24,657	43,981	43,789
Cumulative patients started ART	3,000	13,183	37,840	81,821	125,610
Patients alive on ART	No data	10,761	28,110	57,356	86,279
<i>Private sector ART sites</i>	0	0	23	38	45
New patients started ART in year	0	0	977	2,370	1,531
Cumulative patients started ART	0	0	977	3,347	4,878
Patients alive on ART	0	0	977	2,624	3,677
<i>Public and Private ART sites</i>	9	24	83	141	154
New patients started ART in year	No data	10,183	25,634	46,351	45,320
Cumulative patients started ART	3,000	13,183	38,817	85,168	130,488
Patients alive on ART	No data	10,761	29,087	59,980	89,956

Introduction and Methodology:

This is a report on the status of antiretroviral therapy (ART) in Malawi up to September 30th 2007.

Public sector site visits: between October and November 2007, all 109 health facilities in the public sector earmarked for ART were visited. The visits were conducted by the Ministry of Health HIV Unit (Simon Makombe, Amon Nkhata and Anthony Harries), who were accompanied by their partners: Omba Lwanda from KCH; Joseph Yu from the Taiwan Medical Mission; Olesi Pasulani from Thyolo-MSF; Cosmas Matawera from Mchinji. Three ART supervisors, Dr Shibru Berhanu (Mzuzu Central Hospital), Dr Damas Ngoma (Lighthouse) and Dr William Katamba (QECH) also accompanied the Unit.

Each visit lasted half a day during which a structured supervision and a drug stock-level assessment were carried out, and this was followed by a monitoring and evaluation exercise. Data on ART parameters were collected from the patient master cards and the ARV Register. Much effort was made in ensuring that outcomes (particularly death and defaulter) were correct, and we believe that outcomes are accurately represented in this report. During the visits, certificates for excellent performance awarded at the last visit were presented to the clinic staff (see below).

Private sector site visits: between October and November 2007, all 45 ART sites in the private sector were visited by Stuart Chuka from MBCA, using the same core methodology as for the public sector.

Data collection in public / private sector, outcome status censored on 30th September 2007:-

The first data set is the status of new patients who were started on free ART in Malawi between July 1st and September 30th, 2007, **the “quarterly analysis”**. In the public sector only, data on ART clinics and staff complements, HIV-related diseases, and HIV counselling and testing were also collected for this 3-month period.

The second data set is the status of all patients who ever started on free ART in Malawi up to September 30th, 2007, **the “cumulative analysis”**.

The third data set collected only in the public sector is the **12-month, 24-month and 36-month cohort outcome analysis**, with data collected on patients starting ART in Malawi in Q3 2006, Q3 2005, and Q3 2004 respectively

Data collation and presentation for the years 2003 – September 2007:

Data on ART for the 4 years (2003 – September 2007) are collated and presented to show the progress made in both the public and private sector for ART.

PUBLIC SECTOR RESULTS:

General:

By September 2007, 109 government and mission health facilities in the country had started patients on free ART. All the facilities were using the national monitoring tools.

ARV regimens: All facilities were using the recommended first line regimen (Stavudine + Lamivudine + Nevirapine) for the majority of their patients. There were 82,990 patients alive and on first line treatment; 3,024 patients alive and on alternative first line regimens (Zidovudine-based or Efavirenz-based) for patients with adverse drug reactions; and 265 patients alive and being treated with a second line regimen for failure of the first line therapy.

Qualitative assessment of sites: All 109 ART clinics were tidy and orderly, and the filing systems and record keeping were excellent. A qualitative assessment of the patient master cards and registers was carried out. The table, with pertinent results, compares the 109 facilities in Q3 2007 with the previous qualitative assessment of the same facilities in Q2 2007. The standards were generally good, and Q3-07 was similar in many respects to Q2-07. However, fewer sites this time round had done a quarterly and cumulative cohort analysis.

Parameter	ART sites (%) Q2 2007 N=109	ART sites (%) Q3 2007 N=109
ARV Register:		
ARV Register numbers correct and match master cards	107 (98%)	109 (100%)
All columns in the ARV register always completed	108 (99%)	108 (99%)
Dates of all adverse outcomes recorded	103 (94%)	107 (98%)
All ARV outcomes updated every three months	93 (85%)	95 (87%)
Patient Master Card:		
Case finding data properly completed on each card	107 (98%)	107 (98%)
Regular record of weight done at each patient visit	108 (99%)	109 (100%)
In each monthly visit all outcome columns completed	108 (99%)	108 (99%)
Pill counts for adherence done according to directives	106 (97%)	106 (97%)
HIV-diseases always indicated on back of master card	105 (96%)	106 (97%)
Cohort Analysis:		
Quarterly cohort analysis done by the site before visit	106 (97%)	100 (92%)
Cumulative analysis done by the site before visit	105 (96%)	99 (91%)
Cohort outcomes correctly done	82 (75%)	81 (74%)

Certificates of excellence: Sites which show an excellent performance in completing ART registers and master cards and correctly doing cohort analyses are awarded a certificate of excellence, approved and signed by the Secretary for Health.

Results for the last three quarters, including the current quarter are shown below:

April to June 2007: sites = 106 – Certificates awarded to 64 (60%)

July to September 2007: sites = 109 – Certificates awarded to 69 (63%)

September to December 2007: sites = 109 – Certificates awarded to 76 (70%)

ART Clinics and Staff: a record is made in all facilities of the number of days in a week that the ART clinic is open to see either new or follow-up patients plus the number of staff who operate the clinic when it is functioning. The total number of days in a week given for ART at all facilities in Q3 2007 was 350.5, translating into an average of 3.2 working days in a week when facilities operate an ART clinic. The table shows the number of staff days per week for clinicians (mainly clinical officers), nurses and clerks for each of the regions and for the country as a whole. The FTE parameters indicate the number of clinicians, nurses and clerks working full-time per week on ART. Thus, for the country as a whole, the equivalent of 98 clinicians was working full-time in ART delivery each week. The workload to man ART clinics is obviously increasing quarter by quarter (compare previous reports).

	Clinician days/week	Nurse days/week	Clerk days/week
North: 22 sites	55	67	74
Central: 39 sites	207	195	154
South: 48 sites	227	228	202
Total: 109 sites	489	490	430
FTEs	98	98	86

Quarterly Analysis for the period July 1st to September 30th, 2007:

1. New patients started on ART in public sector between July and September 2007:

The national data for new patients started on ART in these three months are shown in **Table 1** on quarterly analysis. The details of patients and their outcomes from each facility according to region are shown in the **Annexes**.

There were 15,363 new patients started on ART, with males representing 39% and females representing 61% of the total. Adults comprised 86% of patients and children (aged 14 years or less) comprised 14%. There were data on occupation in 15,341 patients, and the most common recorded occupations were subsistence farmer, housewife and small-scale business people (eg vendors). The majority of patients (64%) were started on ART because of being in WHO Stage III.

The number of patients started on ART because of TB was 1,720 (1,507 with PTB, and 213 with EPTB). This constitutes 11% of new patients started on ART and 25% of patients registered for TB (N=7,006) during the quarter.

The number of women referred from PMTCT to start on ART was 326; 58 facilities had recorded PMTCT referrals in the ARV Register.

The three-month outcomes were good with 95% of patients being alive and on ART at the end of September. Other outcomes such as ambulatory status, work status, side effects and pill counts (where done) were very satisfactory.

The table below shows the recruitment of new patients to ART in Q3 2007 and Q2 2007, compared with what is expected in terms of ceilings and targets given to facilities. In quarter 3, 2007, there were 109 facilities (69 low burden, 28 medium burden, 6 medium/high burden, 2 high burden, 2 very high burden sites and 2 super high burden sites): these sites should have placed 15,675 new patients on ART and in the event placed 98%, an improvement compared with the previous quarter.

In each quarter:	Q2 2007	Q3 2007
Number of facilities	109	109
Expected number of patients to start ART	15,675	15,675
Observed number (%) of patients started on ART	14,799 (94%)	15,363 (98%)

2. HIV testing, CD4 testing capability and HIV-related diseases: July to September 2007

HIV test data:

The data on HIV test results for patients tested in the 109 facilities between July 1st and September 30th, 2007 are shown below.

Parameter	North	Central	South	Total
Number HIV tested	16,900	56,146	86,113	159,159
Number (%) HIV positive	2,436 (14%)	8,705 (16%)	18,773 (22%)	29,914 (19%)
Number (%) referred to ART	2,001 (82%)	7,632 (88%)	15,443 (83%)	25,076 (84%)

Altogether, there were nearly 160,000 clients and patients tested in the 3-month period. Of those HIV-positive, 84% were referred for clinical assessment for ART – this is a good development, and one that is being encouraged by the HIV Unit of the Ministry of Health.

CD4 machines:

There were 20 facilities (18% of total) where there was CD4 count capability, unchanged from the previous report: 3 sites in the North (Mzuzu Central Hospital, Ekwendeni MH and Mzimba DH); 11 sites in the Central region (Kamuzu Central Hospital, Lilongwe SOS, Likuni Mission Hospital, Partners in Hope, St Gabriels MH, Kapiri MH, Dowa DH, Mtengwanthenga MH, Mtengowanthenga Dream, Salima DH, and LifeLine Clinici); 6 sites in the South (QECH, Blantyre Dream Site, Thyolo DH, Chiradzulu DH, Zomba Central Hospital, Machinga DH). No data were collected on this occasion on number of tests done or on functioning status of the machines.

HIV-related indicator diseases:

The number of patients with 4 key HIV-related indicator diseases, diagnosed and treated in the 109 facilities during the quarter, was recorded. TB numbers were obtained from the TB registers; Kaposi's Sarcoma (KS) numbers from the ART registers; numbers of those with cryptococcal meningitis and oesophageal candidiasis from the DIFLUCAN registers kept in the pharmacy or from master cards in those sites not participating in the DIFLUCAN programme. The data are shown in the table below: the data are very similar to data reported in previous quarters:-

HIV Disease	North	Central	South	Total
Tuberculosis (TB)	450	2,718	3,838	7,006
Kaposi's Sarcoma (KS)	31	174	310	515
Cryptococcal meningitis (CM)	100	108	264	472
Oesophageal candidiasis (OC)	185	391	776	1,352

Cumulative analysis for patients ever started on ART up to September 30th, 2007

The national data for all patients who ever started on ART up to the end of September 2007 are shown in **Table 2** on cumulative analysis. The details of patients and their outcomes from each facility according to region are shown in the **Annexes**.

There were 125,610 patients who had ever started on ART – this includes patients who transfer-in from other sites, and it is understood that these patients are counted twice. If we assume that all patients who transfer-out then transfer-in, then the number of new patients ever started on ART is 113,900. There were males representing 39% and females representing 61% of the total. The majority of patients were adults (92%), and 8% were children aged 14 years or below.

There were data on occupation for 124,937 patients, and the most common occupations were housewife, farmer and small-scale business (e.g. vendor). The majority of patients (65%) were started on ART because of being in WHO Stage III.

The number of patients started on ART because of TB was 18,637 (15,859 with PTB, 2,645 with EPTB and 133 with type unknown). This constitutes 15% of all patients started on ART. The number of women ever started on ART as a result of referral from PMTCT was 2,143 (3% of all women), referred from within 80 ARV sites.

The cumulative primary treatment outcomes were as follows. There were 69% of patients being alive and on ART in the facility where they were first registered, and 9% transferred out to another facility and thought to be alive. Thus, 78% of patients (a proportion of whom is double counted) were probably alive. Date of death was known in all patients who died: 4,587 (31%) died in month 1; 3,313 (22%) died in month 2; 1,747 (12%) died in month 3 and 5,088 (35%) died at a later date. Default rates (i.e., patients lost to follow-up) were 10%. The number of patients stopping treatment was small at less than 1%. The cumulative secondary outcomes (ambulatory and work status, side effects and pill counts) were good.

Treatment outcomes of cohorts at 12-, 24- and 36- months

Treatment outcomes of cohorts were performed at 12-months, 24-months and 36-months. The 12-months survival was from patients registered for free ART between July and September 2006 and censored on 30th September 2007 (102 facilities). The 24- months survival was from patients registered for free ART between July and September 2005 and censored on 30th September 2007 (59 facilities). The 36-months survival was from patients registered for free ART between July and September 2004 and censored on 30th September 2007 (17 facilities). Results are shown in the table.

	12-months Survival	24-months Survival	36-months Survival
Number started on ART:	12,173	7,745	2,485
“Presumed Alive”	9,390 (77%)	5,404 (70%)	1,699 (68%)
<i>Alive and on ART</i>	8,230 (68%)	4,305 (56%)	1,227 (49%)
<i>Transferred out</i>	1,160 (9%)	1,099 (14%)	472 (19%)
Dead	1,457 (12%)	1,365 (18%)	426 (17%)
Lost to follow up	1,274 (11)	914 (12%)	343 (14%)
Stopped treatment	52 (<1%)	62 (<1%)	17 (1%)

The 12-month survival analysis indicated that 77% of patients were alive (68% alive and on ART + 9% transferred out and presumed alive). The 24-month survival indicated that 70% were alive while the 36-month survival analyses indicated that about 68% of patients were alive (alive and on ART + transferred out and presumed alive).

Stocks of ARV drugs and drug for HIV-diseases as of October and December 2007

In each public sector facility a stock count was performed of ARV drugs and certain specific drugs for HIV-related diseases.

ARV Drugs:

Stocks of ARV drugs (first line and alternative first line and second line) are shown on the next page in tabular form. According to the stocks at the time of the assessment, there were enough First line ARV drugs to start about 39,000 new patients on therapy (this lasts for 6 months at current rates of recruitment) and enough “Continuation packs” to keep the current 90,000 patients plus the new patients starting on treatment for about 4-5 months. UNICEF are due to replenish drug stocks in December 2007.

Drugs for HIV-related diseases

Pill counts and stock outs for drugs for key HIV-related diseases are also shown on the next page. The assessments coincided in the Southern region with distributions of cotrimoxazole and this explains some of the high stock levels in some South Region sites. Major problems were with vincristine and morphine where three quarters or more of sites had complete stock-outs.

First line ARV drugs + Duovir	North	Central	South	Total
	Number of tins of tablets (either 15 or 60 in each tin)			
Lamivir-30 – SP (15 tab tins)	6,039	11,520	6,063	23,622
Lamivir-40 – SP (15 tab tins)	2,914	5,746	6,798	15,458
Triomune-30- SP (15 tab tins)	6,388	11,513	6,380	24,281
Triomune-40 – SP (15 tab tins)	3,106	5,677	6,855	15,638
Triomune-30- CP (60 tab tins)	88,342	154,688	160,841	403,871
Triomune-40 – CP (60 tab tins)	18,461	49,329	59,265	127,055
First line alternative and second line ARV drugs	North	Central	South	Total
	Number of tins of tablets (60 or 30 in each tin)			
Zidovudine-Lamivudine, includes PEP (60 tab)	1,748	3,297	6,814	11,859
Nevirapine (60 tab)	1,962	2,155	7,463	11,580
Stavudine-Lamivudine-30 (60 tab)	272	907	1,716	2,895
Stavudine-Lamivudine-40 (60 tab)	384	1,131	1,214	2,729
Efavirenz (30 tab)	421	2,026	2,681	5,128
Tenofovir (30 tab)	377	1,634	838	2,849
Kaletra (180 caps)	134	3,424	2,725	6,283

Drugs for HIV-diseases	North	Central	South	Total
	Number of tablets or vials in facilities in each region			
Fluconazole tablets	15,684	44,864	33,716	94,264
Cotrimoxazole tablets	515,740	2,553,500	22,970,000	26,039,240
Acyclovir tablets	81,925	57,775	47,280	186,980
Ceftriaxone vials	3,497	7,128	8,325	18,950
Ciprofloxacin tablets	38,005	72,100	181,450	291,555
Vincristine vials	656	665	493	1,814
Morphine tablets	831	4,591	1,503	6,925
Amitryptiline	539,084	430,318	143,000	1,112,402
Drugs for HIV-diseases	North	Central	South	Total (%)
	Number of ART facilities with NO drugs in stock			
Fluconazole tablets	12	9	19	40 39%
Cotrimoxazole tablets	8	6	3	17 17%
Acyclovir tablets	12	11	22	45 45%
Ceftriaxone vials	17	27	28	72 71%
Ciprofloxacin tablets	11	11	16	38 37%
Vincristine vials	18	24	33	75 74%
Morphine tablets	19	26	39	84 82%
Amitryptiline tablets	10	10	22	42 41%

An audit was conducted on all sites to see if they had 3 of the key drugs (cotrimoxazole, vincristine and morphine) needed for good quality OI care. There were only 10 (9%) facilities that had all three drugs present in the pharmacy.

An audit was carried out on cotrimoxazole preventive therapy (CPT). In the ART clinic, patients on CPT are indicated in master cards, and at the moment, this is the only data available for CPT usage. Thus, the number of ART patients taking CPT was documented. There were 80 sites providing CPT to ART patients, and in the third quarter of 2007, there were 62,601 patients receiving ART and CPT together.

PRIVATE SECTOR RESULTS:

The results of the private sector are shown in Tabular Form in **Table 3** and **Table 4**. There were 45 sites providing ART in the private sector by September 30th, 2007.

For the quarterly analysis (**Table 3**), there were 565 new patients started on ART, 55% of whom were male and 3% were children. Of those starting, 51% started due to Stage 3, 13% due to Stage 4 and 36% based on a low CD4 count in Stage 1 or Stage 2. There were 27 patients started on ART due to TB. Of the 565 patients started on ART, 93% were alive and on ART, 3% were dead and 4% transferred out.

For the cumulative analysis (**Table 4**), there were 4,878 patients ever started on ART, 52% of whom were male and 4% were children. Of those starting, 44% started due to Stage 3, 20% due to Stage 4 and 36% based on a low CD4 count in Stage 1 or Stage 2. There were 374 patients started on ART due to TB. Of the 4,878 patients started on ART, 75% were alive and on ART, 7% were dead, 4% were lost to follow-up and 13% were transferred out.

PUBLIC AND PRIVATE SECTOR RESULTS COMBINED:

The results of the public and private sector together are shown in Tabular Form in **Table 5** and **Table 6**. By September 2007, there were 154 sites altogether providing ART in Malawi, using national systems

For the quarterly analysis (**Table 5**), there were 15,928 new patients started on ART, 40% of whom were male and 14% were children. Of those starting, 64% started due to Stage 3, 17% due to Stage 4 and 19% based on a low CD4 count in Stage 1 or Stage 2. There were 1,747 patients started on ART due to TB. Of the 15,928 patients started on ART, 95% were alive and on ART, 3% were dead and 2% transferred out.

For the cumulative analysis (**Table 6**), there were 130,488 patients ever started on ART, 39% of whom were male and 8% were children. Of those starting, 65% started due to Stage 3, 21% due to Stage 4 and 14% based on a low CD4 count in Stage 1 or Stage 2. There were 19,011 patients started on ART due to TB. Of the 130,488 patients started on ART, 69% were alive and on ART by end of June, 12% were dead, 10% were lost to follow-up and 9% were transferred out.

COMMENT

ART scale up in Malawi continues to progress well. Sites are doing well, despite the increasing burden of work. The majority are taking the initiative of doing quarterly and cumulative cohort analysis, although some sites are still not coming up with correct outcomes. This will require continued and regular vigilance and supervision. The treatment outcomes for ART are reasonable. Early death rates are still a problem, and defaults still constitute a significant proportion of the outcomes.

ARV drug stocks were again assessed, and nationally drugs stocks are adequate. However, some sites are over-performing to a large extent and causing problems with drug stocks (both for starter packs and continuation packs). The quarterly drug stock taking assists in the activity of re-distributing drugs from under- to over-performing sites.

Some drugs for HIV-related diseases, particularly morphine and vincristine, are out of stock in most facilities.

Challenges and potential solutions:

As in previous reports, some important challenges emerging from ART scale up are highlighted for discussion and action. Progress or otherwise in these areas by June 30th 2007 is discussed below in bullet point style, and action points are in bold:-

- Human resources. There is still a dire shortage of staff at all facilities and at the central unit. Formal ART training (and funding) for peripheral staff was decentralised to districts at the beginning of the year. As of the end of September 2007, there has been no district based training of staff run by any of the trained Trainers at any of the Round 1 or Round 2 sites. This lack of regular training continues to be a source of concern
- Infrastructure. ART clinic rooms and pharmacies are now becoming too small to handle patient numbers and drugs. Despite raising this issue every quarter, there is still no progress or plans being made. **It is suggested that the PAM unit of MOH starts the process of inspecting rooms and pharmacies with a view to recommending extensions and new building**
- Pharmacy management. In general there is good pharmacy management of ARV drugs and OI drugs. The national supply of drugs for October have come 2 months late and this is a source of concern for over-performing sites which need a re-distribution of drugs from under-performing sites in order to avoid stock-outs
- Drugs for HIV-related diseases. The CPT is beginning to be distributed to sites, with the exercise expected to be completed by the end of the year

- Cohort analysis. The supervision teams have learnt to be time –effective with the manual system of doing cohort analysis, and are coping with ART sites having 1500+ patients. These techniques have been passed on to the peripheral sites. However, a computer records system should make this easier. A pilot computer study has started in 4 sites: 2 in the North (Rumphi and Nkhata Bay) and two in the Central region (Salima and Dedza): these will be formally analysed early next year
- Data quality and supervision. Although many sites are maintaining good records and doing cohort analysis, some sites are still unable to generate accurate cohort analyses. Supervision visits continue to be a critical mechanism to ensure that complete and accurate facility (and national) level data are available for monitoring and drug forecasting needs
- During this supervision all Round 1 and 2 ART sites were re-stocked with ART M&E tools for 2008
- Access to services and follow-up of patients. All the 55 Round 3 have been accredited for ART, and drugs are expected to arrive in December. A one day refresher training (at which stationary will be distributed to all the sites) will take place in the first week of December. Sites are expected to start deliverig ART by end of December
- Clinical supervision. The 4 ART supervisors, at Mzuzu Central Hospital, Kamuzu Central Hospital, QECH and Zomba Central Hospital, are doing a good job and assist greatly with the national monitoring exercise as well.
- High early death rates. Still, two thirds of the ART deaths occur in the first three months of treatment. Cotrimoxazole preventive therapy (CPT) has been shown in an operational audit to reduce these deaths by about 40%. Regular CPT will hopefully start in all sites from early next year when the CPT distribution is completed
- Rewarding good performance in ARV clinics. The quarterly issuing of certificates for excellent performance continues to be a popular and cheap way to motivate staff
- A retrospective monitoring of viral load suppression and viral drug resistance was completed in four sites under the guidance of MOH, CDC and WHO, with preliminary results showing that in patients on ART for 12 months, 95% had viral suppression with viral loads < 400. This activity needs to be formally completed.

We finally thank all the facilities for their sincere welcome and co-operation with the Unit and its partners during these supportive visits, and we congratulate the staff in these facilities for their excellent work.

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17th December 2007

TABLE 1: PUBLIC SECTOR: New patients started on ART in Quarter 3, 2007

Total Started	Number of patients started on ART in the 3 months	15,363	
Sex	Number (%) males	5986	39%
	Number (%) females	9377	61%
Age	Number (%) adults aged 15 years and above	13215	86%
	Number (%) children aged 14 years and below	2148	14%
Occupation:	Housewife	3143	20%
	Farmer	5279	34%
	Forces	142	1%
	Teacher	324	2%
	Business	1974	13%
	HCW	140	1%
	Student	724	5%
	Other	3615	24%
	Occupation Not Known	22	
Reasons for starting ART:	Number (%) with Stage III	9850	64%
	Number (%) with Stage IV	2681	17%
	Number (%) with low CD4 count	2832	18%
	Number (%) with TB	1720	11%
	Number of patients registered with TB in the quarter	7006	
Patient Outcomes	Number of patients started on ART in the 3 months	15363	
	Number (%) alive and on ART	14584	95%
	Number (%) dead	499	3%
	Number (%) defaulted	0	0%
	Number (%) stopped treatment	28	0%
	Number (%) transferred out permanently to another site	252	2%
ART Regimen	Of those alive and on ART:-	14584	
	Number (%) on first line regimen	14381	99%
	Number (%) on alternative first line regimen	185	1%
	Number (%) on second line regimen	18	0%
Ambulatory Status	Number with ambulatory status known	13712	
	Number (%) ambulatory	13109	96%
Work Status	Number with work status known	13712	
	Number (%) at work	12860	94%
Side Effects	Number with side effects counted	13926	
	Number (%) with significant side effects	493	4%
Adherence	Number where pill count has been done	11103	
	Number (%) with pill count showing 95% adherence	10575	95%

TABLE 2: PUBLIC SECTOR: Cumulative patients started on ART up to September 30th, 2007				
Total Started	Total number of patients started on ART		125,610	
Sex	Number (%) males		48684	39%
	Number (%) females		76926	61%
Age	Number (%) adults aged 15 years and above		115582	92%
	Number (%) children aged 14 years and below		10028	8%
Occupation	Housewife		25033	20%
	Farmer		33708	27%
	Forces		1506	1%
	Teacher		3892	3%
	Business		15760	13%
	HCW		1724	1%
	Student		5665	5%
	Other		37649	30%
	Occupation Unknown		673	
Reasons for starting ART:	Number (%) with Stage III		82230	65%
	Number (%) with Stage IV		27003	21%
	Number (%) with low CD4 count		16377	14%
	Number (%) of patients started on ART due to TB		18637	15%
Patient Outcomes	Total number of patients started on ART		125610	
	Number (%) alive and on ART		86279	69%
	Number (%) dead		14735	12%
	Number (%) defaulted		12339	10%
	Number (%) stopped treatment		547	0%
	Number (%) transferred out permanently to another site		11710	9%
ART Regimen	Of those alive and on ART:-		86279	
	Number (%) on first line regimen		82990	96%
	Number (%) on alternative first line regimen		3024	4%
	Number (%) on second line regimen		265	0%
Ambulatory Status	Number with ambulatory status known		78343	
	Number (%) ambulatory		75968	97%
Work Status	Number with work status known		78343	
	Number (%) at work		74831	96%
Side Effects	Number with side effects counted		81314	
	Number (%) with significant side effects		4718	6%
Adherence	Number where pill count has been done		65626	
	Number (%) with pill count showing 95% adherence		62352	95%
Death	Of those who died with Date of death recorded		14735	
	Number (%) dying in the first month		4587	31%
	Number (%) dying in the second month		3313	22%
	Number (%) dying in the third month		1747	12%
	Number (%) dying after the third month		5088	35%

TABLE 3: PRIVATE SECTOR: New patients started on ART in Quarter 3, 2007

Total Started	Number of patients started on ART in the 3 months	565	
Sex	Number (%) males	309	55%
	Number (%) females	256	45%
Age	Number (%) adults aged 15 years and above	547	97%
	Number (%) children aged 14 years and below	18	3%
Occupation:	Housewife	95	17%
	Farmer	16	3%
	Forces	6	1%
	Teacher	25	4%
	Business	83	15%
	HCW	14	2%
	Student	19	4%
	Other	307	54%
	Occupation Not Known	0	
Reasons for starting ART:	Number (%) with Stage III	288	51%
	Number (%) with Stage IV	76	13%
	Number (%) with low CD4 count	201	36%
	Number (%) with TB	27	5%
Patient Outcomes	Number of patients started on ART in the 3 months	565	
	Number (%) alive and on ART	528	93%
	Number (%) dead	17	3%
	Number (%) defaulted	0	0%
	Number (%) stopped treatment	0	0%
	Number (%) transferred out permanently to another site	20	4%
ART Regimen	Of those alive and on ART:-	528	
	Number (%) on first line regimen	518	98%
	Number (%) on alternative first line regimen	10	2%
	Number (%) on second line regimen	0	0%
Ambulatory Status	Number with ambulatory status known	528	
	Number (%) ambulatory	525	99%
Work Status	Number with work status known	528	
	Number (%) at work	523	99%
Side Effects	Number with side effects counted	11	
	Number (%) with significant side effects	10	91%
Adherence	Number where pill count has been done	185	
	Number (%) with pill count showing 95% adherence	181	98%

TABLE 4: PRIVATE SECTOR: Cumulative patients started on ART up to September 30th, 2007				
Total Started	Total number of patients started on ART		4,878	
Sex	Number (%) males		2520	52%
	Number (%) females		2358	48%
Age	Number (%) adults aged 15 years and above		4668	96%
	Number (%) children aged 14 years and below		210	4%
Occupation	Housewife		743	15%
	Farmer		88	2%
	Forces		60	1%
	Teacher		225	5%
	Business		751	16%
	HCW		115	2%
	Student		300	6%
	Other		2596	53%
	Occupation Unknown		0	
Reasons for starting ART:	Number (%) with Stage III		2144	44%
	Number (%) with Stage IV		996	20%
	Number (%) with low CD4 count		1738	36%
	Number (%) of patients started on ART due to TB		374	8%
Patient Outcomes	Total number of patients started on ART		4878	
	Number (%) alive and on ART		3677	75%
	Number (%) dead		357	7%
	Number (%) defaulted		203	4%
	Number (%) stopped treatment		9	<1%
	Number (%) transferred out permanently to another site		632	13%
ART Regimen	Of those alive and on ART:-		3677	
	Number (%) on first line regimen		3438	93%
	Number (%) on alternative first line regimen		227	6%
	Number (%) on second line regimen		12	1%
Ambulatory Status	Number with ambulatory status known		3677	
	Number (%) ambulatory		3670	100%
Work Status	Number with work status known		3677	
	Number (%) at work		3669	100%
Side Effects	Number with side effects counted		16	
	Number (%) with significant side effects		14	88%
Adherence	Number where pill count has been done		623	
	Number (%) with pill count showing 95% adherence		622	100%
Death	Of those who died with Date of death recorded		357	
	Number (%) dying in the first month		141	39%
	Number (%) dying in the second month		50	14%
	Number (%) dying in the third month		39	11%
	Number (%) dying after the third month		127	36%

Total Started	Number of patients started on ART in the 3 months	15,938	
Sex	Number (%) males	6295	40%
	Number (%) females	9633	60%
Age	Number (%) adults aged 15 years and above	13762	86%
	Number (%) children aged 14 years and below	2166	14%
Occupation:	Housewife	3238	20%
	Farmer	5295	33%
	Forces	148	1%
	Teacher	349	2%
	Business	2057	13%
	HCW	154	1%
	Student	743	5%
	Other	3922	25%
	Occupation Not Known	22	
Reasons for starting ART:	Number (%) with Stage III	10138	64%
	Number (%) with Stage IV	2757	17%
	Number (%) with low CD4 count	3033	19%
	Number (%) with TB	1747	11%
	Number of patients registered with TB in the quarter	7006	
Patient Outcomes	Number of patients started on ART in the 3 months	15928	
	Number (%) alive and on ART	15112	95%
	Number (%) dead	516	3%
	Number (%) defaulted	0	0%
	Number (%) stopped treatment	28	0%
	Number (%) transferred out permanently to another site	272	2%
ART Regimen	Of those alive and on ART:-	15112	
	Number (%) on first line regimen	14899	99%
	Number (%) on alternative first line regimen	195	1%
	Number (%) on second line regimen	18	0%
Ambulatory Status	Number with ambulatory status known	14240	
	Number (%) ambulatory	13634	96%
Work Status	Number with work status known	14240	
	Number (%) at work	13383	94%
Side Effects	Number with side effects counted	13937	
	Number (%) with significant side effects	503	4%
Adherence	Number where pill count has been done	11288	
	Number (%) with pill count showing 95% adherence	10756	95%

TABLE 6: PUBLIC AND PRIVATE SECTOR: Cumulative patients on ART by September 30th, 2007				
Total Started	Total number of patients started on ART		130,488	
Sex	Number (%) males		51204	39%
	Number (%) females		79284	61%
Age	Number (%) adults aged 15 years and above		120250	92%
	Number (%) children aged 14 years and below		10238	8%
Occupation	Housewife		25776	20%
	Farmer		33796	26%
	Forces		1566	1%
	Teacher		4117	3%
	Business		16511	13%
	HCW		1839	1%
	Student		5965	5%
	Other		40245	31%
	Occupation Unknown		673	
Reasons for starting ART:	Number (%) with Stage III		84374	65%
	Number (%) with Stage IV		27999	21%
	Number (%) with low CD4 count		18115	14%
	Number (%) of patients started on ART due to TB		19011	15%
Patient Outcomes	Total number of patients started on ART		130488	
	Number (%) alive and on ART		89956	69%
	Number (%) dead		15092	12%
	Number (%) defaulted		12542	10%
	Number (%) stopped treatment		556	0%
	Number (%) transferred out permanently to another site		12342	9%
ART Regimen	Of those alive and on ART:-		89956	
	Number (%) on first line regimen		86428	96%
	Number (%) on alternative first line regimen		3251	4%
	Number (%) on second line regimen		277	0%
Ambulatory Status	Number with ambulatory status known		82020	
	Number (%) ambulatory		79638	97%
Work Status	Number with work status known		82020	
	Number (%) at work		78500	96%
Side Effects	Number with side effects counted		81330	
	Number (%) with significant side effects		4732	6%
Adherence	Number where pill count has been done		66249	
	Number (%) with pill count showing 95% adherence		62974	95%
Death	Of those who died with Date of death recorded		15902	
	Number (%) dying in the first month		4728	31%
	Number (%) dying in the second month		3363	22%
	Number (%) dying in the third month		1786	12%
	Number (%) dying after the third month		5215	35%

