



Government of Malawi Ministry of Health

Integrated HIV Program Report October-December 2021

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

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1 Executive Summary (October-December 2021)

COVID-19 Disruptions to the HIV Program

The first cases of COVID-19 in Malawi were confirmed on 2nd April 2020 and early epidemiological models predicted rapid spread and severe impact of COVID-19 in Malawi.

The DHA issued 5 editions of a circular to all HIV service delivery sites (on 3rd, 17th April, 15th June, 17th August and 14th January) with specific infection prevention guidance for COVID-19, and policy recommendations aimed at decongesting facilities, and reducing travel and contact exposure for patients and health workers. This included a temporary suspension of non-essential services: routine scheduled viral load monitoring for stable adult patients; VMMC; active index partner tracing; new initiation of IPT and PrEP; Teen clubs and other ART support groups involving social gatherings. The DHA also recommended an enhanced implementation of 6-month ARV dispensing for almost all patient groups. As the COVID-19 impact remained much lower than initially feared, the suspended services were successively reintroduced.

However, modified service recommendations were re-instated with the 5th edition of the DHA circular in response to the 2nd wave of COVID-19 that emerged from late December 2020 / early January 2021. This included the temporary suspension of community activities that involve travel or gatherings and most training activities. All facility-based HIV services were recommended to continue as normal provided adequate personal protective equipment (PPE) was available for health workers. In case of PPE shortages, the circular specified a list of non-essential activities that should be deprioritized (community-based HIV testing; recency surveillance; demand creation for VMMC and PrEP; VMMC campaigns; new initiation of PrEP; community condom distribution; initiation of TB preventive therapy for stable ART patients; ART teen clubs).

During 2021 Q4, the number of cases had dropped as the second wave had ended beginning April 2021. Anecdotal observations suggest that many people resumed accessing health services during the quarter and there was no noticeable disruptions attributed to Covid-19 in the HIV services.

Program performance highlights by the end of September 2021 include:

- Scale-up of integrated HIV services had reached the following number of sites:
 - **727** static and **158** outreach HIV testing sites.
 - **783** (static) ART sites; **623** of these started at least one pregnant or breastfeeding woman.
 - **701** sites with HIV-exposed children in follow-up.
- **684,267** persons were tested for HIV by a trained provider and received their results; **125,567 (18%)** accessed HIV testing for the first time; **535,955 (82%)** were repeat testers and **22,260 (4%)** of these received confirmatory testing (after having tested positive in the past). **19,453 (3.0%)** clients received a positive result for the first time¹.

¹ The crude number of new diagnoses is based on the self-reported previous testing history documented in the HTS registers. Model-based estimates of the “1st 90” suggest that undisclosed repeat positives account for about half of these. This implies the true yield of new diagnoses may be only around **1.4%**.

- A total of **130,070** people received **211,801** self-test kits; **107,165 (51%)** of these were for use by the recipient and **104,633 (49%)** for onward distribution to sex partners or other people.
- **18,888 (97%)** of **19,548** blood units collected were screened for (at least) HIV, hepatitis B and syphilis.
- A cumulative total of **13,835** clients were referred for PrEP eligibility screening and **12,890 (93%)** were found eligible. **11,221 (87%)** were enrolled in PrEP and **7,631 (68%)** clients were retained on PrEP at the end of the December 2021.
- **157,139 (95%)** of 164,803 women at ANC had their HIV status ascertained; **8,367 (5%)** of these were HIV positive. **135,464 (98%)** of 144,231 at maternity had their HIV status ascertained **8,290 (6%)** of these were HIV positive.
- **19,463** patients started ART this quarter; **88%** were classified as asymptomatic / in WHO stage 1 and started under the “Test & Treat” policy.
- **898,132** patients were alive and on ART by end of December 2021.² This means that **91%** of the estimated 986,240 HIV positive population was on ART. ³ ART coverage was **78%** (42,771/ 54,742) for children⁴ and **92%** (855,361 / 931,449) for adults.
- **87,938 (93%)** of viral load results from routine monitoring were <1000 copies/ml. Viral suppression rates for routine samples among children (0-14 years) and adults (15+ years) were **76%** and **94%**, respectively.
- **80%** of adults and **81%** of children were retained alive on ART at 12 months after initiation.⁵
- Out of **893,136** patients on first line adult ART **853,785 (97%)** had transitioned to TDF/3TC/DTG and only **1,571 (<1%)** were on TDF/3TC/EFV.
- **9,001** ⁶ **(92%)** of an estimated 9,798³ HIV infected pregnant women in Malawi were on ART this quarter. **6,314 (70%)** of these were already on ART when getting pregnant and **2,687 (30%)** started ART during pregnancy/delivery.
- An additional **883** breastfeeding women (re-)started ART in WHO stage 1 or 2.
- **86%** and **82%** of women started while pregnant or breastfeeding were retained on ART at **6 and 12 months** after initiation, respectively.
- **7,747 (7%)** of infants discharged alive from maternity were known to be HIV exposed, **7,465 (96%)** of these received ARV prophylaxis (nevirapine).
- A total of **11,247 HIV** exposed children were newly enrolled for follow-up this quarter; **11,186 (80%)** of these were enrolled before age 2 months.
- Out of the total 986,240 estimated PLHIV by end December 2021:

² 898,132 patients were reported as alive on ART at their registered site. In contrast to previous reports, no adjustment for patients in transit can be made this quarter. Tens of thousands of patients who were previously marked as lost to follow-up have been re-classified as transferred out in the context of active tracing undertaken by implementing partners. This precludes the calculation of new transfers out from cumulative cohort data.

³ 2022 Spectrum Model estimates for the HIV population in December 2021.

⁴ Number of children (0-14 years) on ART extrapolated from age-disaggregated cohort reports from sites with electronic medical record systems (see section 11.3 on page 25).

⁵ Actual retention rates are thought to be about **10%** higher due to misclassification of ‘silent transfers’ as defaulters in clinic-based survival/retention analysis. (see section 11.4)

⁶ Adjusted for double counting due to patient transfers / ‘failed ART initiations’ among women lost to follow-up within 6 months of ART registration.

- An estimated **93%** of PLHIV knew their status (diagnosed)
- **98%** of whom were on ART
- **93%** of whom were virally suppressed.⁷
- This means that the Q4 2021 scale-up target for the population diagnosed was achieved. The increase in the proportion of PLHIV who knew their status was higher than what was reported in the previous 2021 Q3 quarter's MPHIA 2020/21 result (88%). This is likely due to the Estimation of "awareness of HIV status" in household surveys is subject to misclassification due to non-disclosure of previous diagnosis. It is likely that misreporting of previous diagnosis is particularly common among PLHIV who have never started or interrupted ART due to social desirability and denial. The MPHIA survey adjusted the awareness estimate with biological markers (ARVs in blood samples) to compensate for this known bias. 20% of study participants who reported to be not previously diagnosed had ARVs in their blood. However, this adjustment method does not identify previously diagnosed PLHIV who have never started or interrupted ART for a longer period (more than a few weeks ago)
- Consequently, the gap between the estimated number of PLHIV diagnosed and those on ART has declined to 17,851. The great majority of people diagnosed and not on ART have been previously on treatment and interrupted.
- The 93% VL suppression is lower than what was reported in the last quarter's MPHIA 2020/21 result (97%). This is likely due to the fact that the programmatic and model estimation of cohort-level VLS is based on extrapolating from VLS rates among patients who have received a routine VL test in the program. There are inherent limitations with this extrapolation because annual VL monitoring coverage has remained low (around 65% in 2021) and patients receiving a VL may not be fully representative of the entire national treatment cohort. In addition, All VL testing in the MPHIA survey was done from plasma samples and these are known to be more accurate because the eluted DBS samples can include platelet-bound viral DNA, which can be amplified and lead to false-high VL results.
- Malawi has already surpassed all of the 90-90-90 targets which were set for December 2020. In line with the new National Strategic Plan 2020-25, the current and future reports will measure progress against the UNAIDS fast-track 95-95-95 targets. See **Figure 1** below:

⁷ Estimation methods for progress towards the 95-95-95 treatment targets

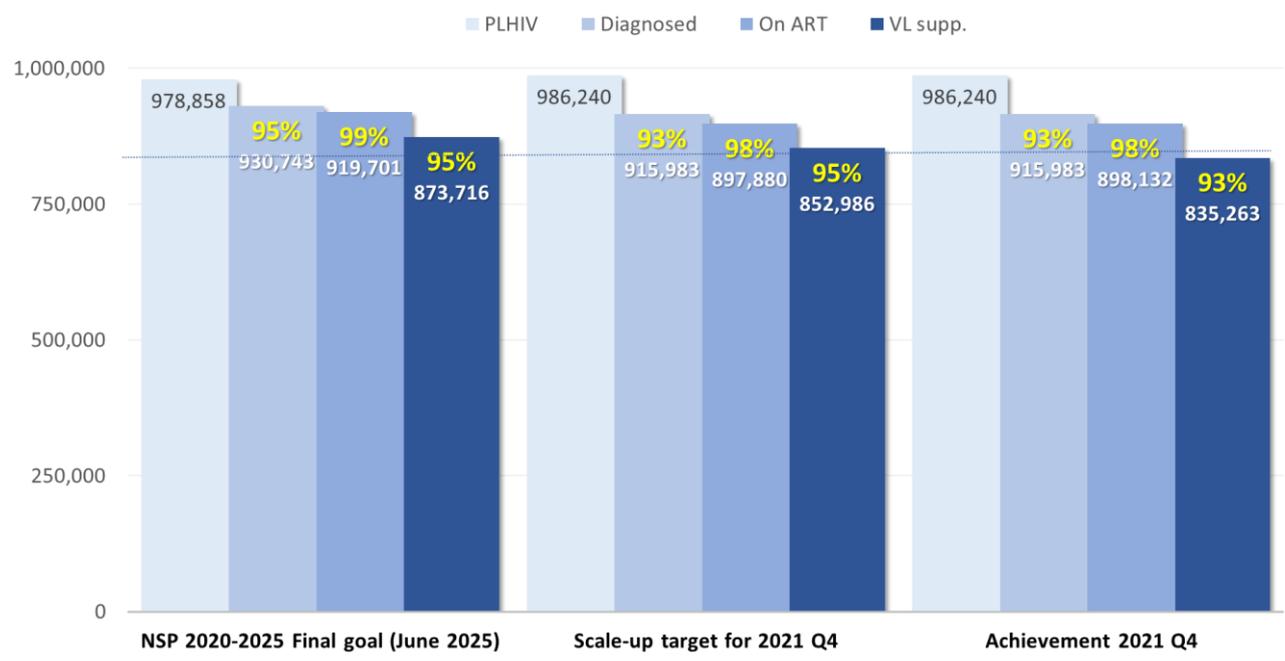
'First 95' (915,983 diagnosed): Calibrated to the UNAIDS Shiny90 model estimates; the 88.3% MPHIA estimate for adults (15+) diagnosed (self-reported and/or presence of ARVs in blood sample) is assumed to represent the status for all PLHIV (Spectrum) by end of Q1 2020 ($990,074 \times 88.3\% = 874,235$); add: 301,165 = 52% of 138,903 people reported as newly diagnosed between March 2020 – December 2021 (HTS program data adjusted for an estimated 48% of repeat testers misclassified as newly diagnosed); subtract: 4,542 as the estimated deaths among the diagnosed PLHIV on and off ART (2022 Spectrum model) .

'Second 95' (898,132 on ART): patients retained alive on ART by end Q4 2021 from routine ART program reports.

'Third 95' (835,263 virally suppressed): extrapolated from the 94% of patients with a routine VL monitoring result <1000 copies/ml this quarter, applied to the 898,132 patients on ART.

Figure 1

Malawi progress towards the 95-95-95 HIV treatment targets (December 2021)



2 Integrated HIV Program Overview

Malawi's National HIV Program has undergone several important policy changes since its inception in 2004. The 4th Edition of the **Malawi Integrated Clinical HIV Guidelines** was published in **July 2018** and some policies /components were revised. Training for nationwide implementation is underway and refresher training for the revised components have been planned. The following are the policies/components of policy that were revised and endorsed for implementation and scale up in Malawi by the Ministry of Health and Population beginning in April 2019:

- Introduction of **dolutegravir- (DTG) based first line ART** regimens for all: Transition of new and existing eligible patient groups weighing 20kg +.
- Phasing out of **NNRTI-Based (NVP)** regimens: Transitioning of clients on NVP to DTG or PI Based regimen.
- **Differentiated Service Delivery (DSD)** Model: Introduction of Six-Monthly ART dispensing.
- **Viral Load Monitoring**: transition from 2-yearly to annual scheduled monitoring.
- Pre-exposure prophylaxis (**PrEP**): Oral PrEP as additional preventative method for HIV-negative clients at substantial risk of HIV infection.
- TB Preventive Therapy (TPT): Dispense **IPT or 3HP** to all eligible adult PLHIV newly initiated on ART who have not previously completed a course of TPT.

The **decentralization of ART services** continues as new health facilities are established and existing facilities attain minimum staffing and infrastructure requirements for ART.

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 have fully integrated their respective site supervision exercises since April 2015.

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 Department of HIV and AIDS Management Information System (DHA-MIS). 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 HIV testing, ANC, maternity, exposed child and pre-ART follow-up, ART and TB
- Physical drug stock-level assessment
- Identification of sites in urgent need of clinical mentoring
- Semi-structured feedback and performance rating for the supervision teams by facility staff

One copy of the supervision form is returned to the Department for HIV and AIDS, where data are entered in a custom SQL Server / MS Access database (Department of HIV and AIDS Management Information System; DHA-MIS) 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. A growing number of health workers from sites all over the country participate as supervisors in this quarterly exercise and this has strengthened the national HIV Program identity and has greatly facilitated communication between program staff at the national, zonal, district and facility level.

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

3.2 Supervision Outcomes

791 public and private sector facilities were visited for **biomedical HIV program supervision** between 17th and 28th of December 2022.

The large number of sites was covered by **272** supervisors working in **32** teams that spent **2,079 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. **575 (73%)** sites were awarded a *certificate* for **excellent performance**. This is the same as results from the previous quarter (575). **91 (12%)** sites had significant weaknesses and were rated to require **intensive mentoring**. Mentoring capacity will need to be further expanded.

Table 1

Table 1: Outcomes of integrated HIV services supervision for 2021 Q4

Zone	Total facil. visited*	Supervision hours spent at facilities		Performance (# and % of sites)	
		Total	Average per site	Excellent perform.	Mentoring needed
NZ	144	353	2.4	94 65%	23 16%
CEZ	112	259	2.3	75 67%	22 20%
CWZ	176	461	2.6	132 75%	19 11%
SEZ	180	500	2.8	136 76%	8 4%
SWZ	179	506	2.8	138 77%	19 11%
Malawi	791	2,079	2.6	575 73%	91 12%

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

Table 1 summarizes the supervision outcomes by zone. Most facilities were using the standard national M&E tools. **257** sites had cumulatively registered more than 2,000 ART patient and **92** of these had registered more than 5,000. **210** (81%) of these high burden sites were using point-of-care electronic medical records (EMR) systems. **207** low- and medium-burden sites were using a back-data entry solution of laptops to capture patient visits recorded on the paper patient cards. Some NGO-supported sites were using custom tools compatible with the national standard reporting requirements.

4 Inventory of Sites and Services

4.1 Sites and Services

There were **740** static and **222 outreach** HIV testing sites in Q4 2021.

Table 2

Facilities with integrated HIV services in the 5 Zones. Availability of services defined by performance (at least 1 patient enrolled) during 2021 Q4

Zone	Total fac.(1)	Facilities providing HIV services						CD4 count machines (2)				urine-LAM			serum CrAg					
		Exp. child		PMTCT B+		ART		Installed	Functional	Tot.Results	Results <200	Total	Res. Pos	Total	Res. Pos					
SEZ	182	162	89%	160	88%	176	97%	21	12%	19	90%	3,204	807	25%	1,891	265	14%	1,238	51	4%
SWZ	182	158	87%	142	78%	177	97%	35	19%	29	83%	2,944	839	28%	1,377	202	15%	1,151	47	4%
CWZ	178	148	83%	125	70%	176	99%	22	12%	22	100%	2,711	760	28%	1,249	226	18%	1,162	53	5%
CEZ	112	105	94%	91	81%	112	100%	17	15%	18	106%	802	223	28%	488	41	8%	366	18	5%
NZ	148	128	86%	105	71%	142	96%	23	16%	23	100%	1,430	410	29%	704	70	10%	577	44	8%
Malawi	802	701	87%	623	78%	783	98%	118	15%	111	94%	11,091	3,039	27%	5,709	804	14%	4,494	213	5%

(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 **802** sites designated to provide clinical HIV services in Q4 2021, by zone. At the national level, there were **783** (static) sites with at least one patient on ART; **623** sites had enrolled women under PMTCT Option B+; **701** had enrolled HIV exposed children for follow-up. ART services were now available at almost all designated sites in the 5 zones.

CD4 count machines (including 'point of care' machines) were installed at 118 sites, and **111 (94%)** of these had produced at least 1 result during Q4 2021. The total number of CD4 results produced (**11,091**) was higher than the previous quarter's (7,359). **3,039 (27%)** of the 11,091 CD4 results were 200 cells/ml or less and these patients were therefore eligible for routine urine LAM and serum CrAg. With the introduction of the 'Test & Treat' policy, routine CD4 count testing to determine when to start ART has been deprioritized. However, the 2018 Malawi HIV guidelines introduced routine baseline CD4 counts at ART initiation where available and outputs are expected to increase further.

5,709 clients were screened for urine LAM and 804 (14%) of these were positive and were eligible to be treated for TB. A total of 4,494 patients were screened using serum CrAg and out of these 213 (5%) had a positive result and according to the 2018 ART guidelines, they were eligible for active meningitis assessment with the intention of either treating or giving pre-emptive antifungal therapy

4.2 Staffing of HIV Services

4.2.1 HIV Testing Services

The Department for HIV and AIDS has maintained a dedicated system for professional registration and performance tracking for HIV testing providers since 2011. This separate

registration system is needed because HIV testing providers include lay persons with HIV testing training who are not registered with any other professional body. All testing providers are issued with a unique ID and a professional logbook for documentation of duty stations, trainings, sit-in observation and proficiency testing results. Logbook holders are requested to record the total number of tests done at the end of each month. Logbook holders are requested to record the total number of tests done at the end of each month. Logbooks were not routinely reviewed during the 2021 Q4 supervision and key performance data for each provider were not summarized on the site supervision form.⁸

4.2.2 ART/PMTCT

Integrated HIV program supervision has included a staffing census for ART clinics since Q3 2014. This census is undertaken during the site visits, indicating all staff members who actually worked at the ART clinic on the most recent clinic day. The census is designed to provide an accurate snapshot of the actual staffing of ART services each quarter. The numbers collected may be slightly lower than longer term averages, because around 200 service delivery staff are themselves participating in the supervision exercise and will not be counted as having worked in their ART clinic during the supervision period. The table below shows that overall staffing levels have slightly declined over the last 2 quarters. However, the number of ART clinicians increased by 33 from 822 to 855 from the previous quarter.

Among the other cadres, **1,267** were nurses and **831** were auxiliary staff (health surveillance assistants, clerks, etc.)

Table 3

	2021 Q1		2021 Q2		2021 Q3		2021 Q4	
Clinicians	907	27%	1,005	27%	1,033	27%	1,014	27%
Nurses	1,320	39%	1,442	39%	1,519	40%	1,543	41%
Pharmacy staff	294	9%	337	9%	348	9%	326	9%
Auxiliary Staff	873	26%	900	24%	876	23%	842	23%
Total	3,394		3,684		3,776		3,725	

An estimated 4.0 million ART patient visits are currently managed at the 783 ART sites per annum, based on 898,132 patients alive on ART and an average dispensing interval of 2.5 months. With 260 working days per year, an average of 16,581 patient visits is therefore managed by the ART sites per working day. At current staffing levels, this translates into an average of **16** ART patient visits per clinician and **11** per nurse per day. This approximate HRH capacity assessment does not take account of site-specific differences in patient burden and staffing levels and there are several medium and high burden sites with sub-optimal staffing. However, the national treatment program is fully decentralized to the health centre level and the program continues to devolve the growing patient burden to peripheral facilities. Since 2011, the steepest increase in ART patient numbers has been recorded at the 300 small peripheral sites that have the largest collective staffing capacity (see **Figure 11** on **page 35**).

⁸ The logbook review was temporarily suspended to minimize the workload for the supervision teams

5 HTS Program Outputs

HIV testing protocols were revised in 2016. A new HIV testing register was implemented in the course of a national re-training campaign for all HTC providers between May and November 2013. Protocol revisions include:

- Clear recommendations for re-testing based on the client's test result and risk assessment
- Proper documentation of confirmatory testing for clients with a prior positive result (usually performed at enrolment into care).

The HIV testing program observed a number of challenges. First, although quality control (QC) samples were available at most sites, some sites had not carried out any QC testing. Space constraints are common and remain a challenge. Providers have to share the testing rooms at most facilities. Some mentors supported by partners are not adequately trained and the mentorship provided is therefore not comprehensive. 'Conveyor-belt' (batched) HIV testing is still being practised in some facilities despite ongoing attempts to reinforce the one-client-in-session testing policy. Finally, some implementing partners have introduced modified M&E tools at facilities they are supporting that are adding considerable work load and distraction.

5.1 Quality Control (QC) Testing

The national HIV testing protocol requires all sites to perform QC testing at least once per week. Additional QC is required when a new consignment of test kits is received; when starting a new lot; when a new provider joins the facility, when test kits have been exposed to temperatures above manufacturer recommendations. The QC procedure involves testing each of the 2 rapid test kits used in the national algorithm with a known negative and a known positive serum to confirm that the tests show the expected results. This means that 2 positive and 2 negative results are expected for each complete QC set. QC results have been documented in a dedicated section in the standard HIV testing register since 2013. From Q3 2016, QC results have been systematically reviewed during the integrated HIV program supervision.

347 (47%) of the 740 active testing sites had documented at least 1 QC set this quarter and **183 (52%)** had recorded the minimum of 12 sets (one for each week). At **345 (99%)** of sites, all samples produced the expected result.

5.2 HIV Testing and Counselling Outputs

684,267 people⁹ were tested and counselled for HIV between October and December 2021. This is a 6% increase from the previous quarter (642,325). Many of the dedicated testing staff (HIV Diagnostic Assistants, HDAs) hired by PEPFAR implementing partner organizations have been re-purposed to other tasks following PEPFAR guidance to reduce "over-testing".

639,367 (93%) of all tests were performed at health facilities, **8,069 (1%)** were done in stand-alone HTC sites, **35,378 (5%)** were done outside of facilities / in the community and **1,444**

⁹ Reports from the HTC register are based on client encounters. It is not possible to de-duplicate people who access HTC multiple times in the reporting period. However, very few individuals come for repeat testing in less than 3 months and the number of HTC encounters in one quarter is therefore assumed to represent individuals.

(<1%) were from self-test returning clients tested at the facility. **19,453** people were reported as newly diagnosed with HIV this quarter. Out of these, **18,051 (93%)** were diagnosed at health facilities; **234 (1%)** at stand-alone HTC sites; **1,155 (6%)** through community-based testing and **13 (<1%)** were from self-test returning clients tested at the facility. The reported 'yield' for new diagnoses was **3.0%** (excluding clients who disclosed a previous positive result from the denominator).

However, based on UNAIDS "Shiny90" model triangulation of population survey results and program data, **at least 53%** of all clients classified as "new positive" in HTS registers are assumed to be undisclosed repeat testers. Discounting 53% from the 19,453 reported "new positives" results in an estimated **9,143** genuine new diagnoses this quarter. This reduces the true 'yield' of new diagnoses in the HTS program to **1.4%**.

5.3 HIV testing access type

534,974 (78%) of people tested were patients receiving provider-initiated testing and counselling (PITC); **119,452 (17%)** accessed voluntary testing and counselling, door-to-door, community-based testing and **29,841 (4%)** came for testing with a *Family HTC Referral Slip* (FRS) that was issued to a family member at a prior HTS encounter. 29,841 family members or contacts presented with an FRS for testing to the facilities and this represents successful referral rate of 114% based on the total number of FRS issued this quarter (26,088). The over 100% rate can be attributed to challenges in documentation in the HTS registers.

5.4 Age and sex distribution among HIV testing clients

Out of **684,267** people tested and counselled, **33%** were males and **67%** were females. **38%** of females were pregnant. The ratio of males (**45%**) to non-pregnant females (**55%**) has remained constant. Testing among pregnant women is almost entirely provider-initiated and there is no comparable access route targeting males.

153,226 (22%) of all people tested accessed HTC with their partners (as a couple).

49% of all people tested and counselled were 25 years and above, **43%** were adolescents or young adults (15-24 years) and **7%** were children (<15 years). **1,046 (<1%)** of rapid tests done were among infants.

Figure 2 and **Figure 3** show that the absolute increase in testing output since introduction of the HDA cadre in 2016 was mainly driven by non-pregnant females, males and the age groups 15-24 and 25 years and above. From 2021 Q3 to Q4 2021, the number of males, pregnant women and non-pregnant females tested changed by 1%, 5% and 8% respectively.

Figure 2: Distribution of sex and pregnancy status among clients tested by quarter

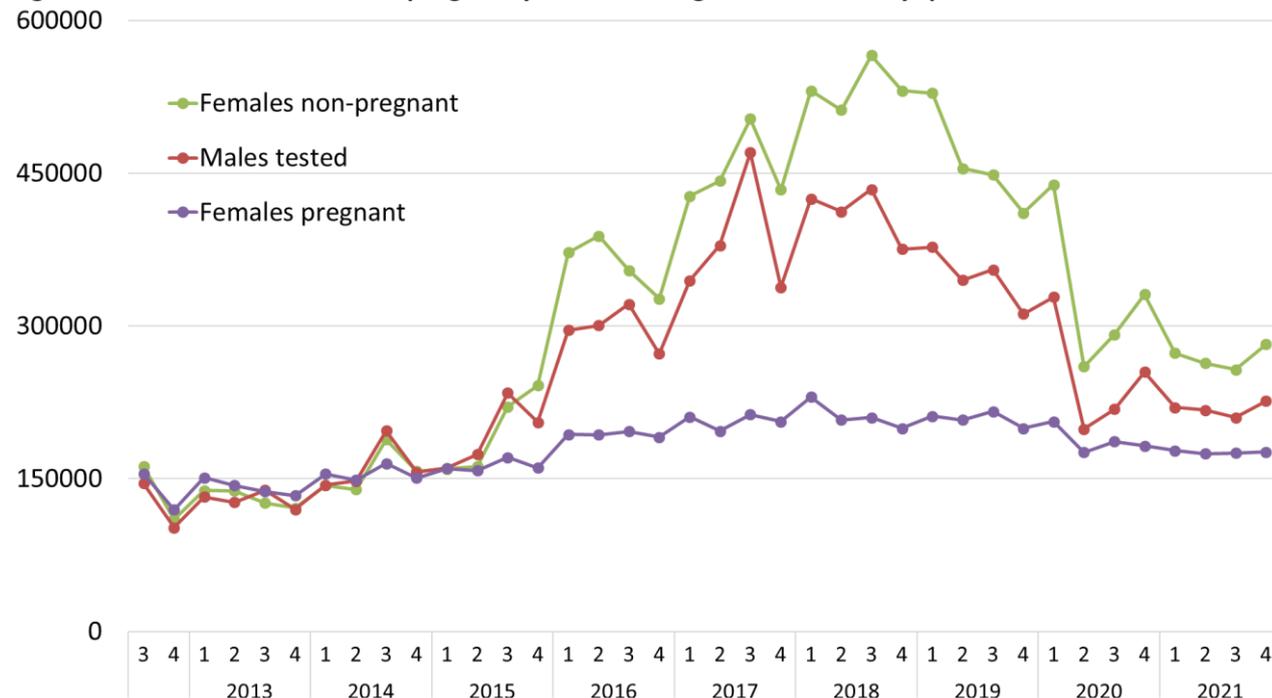
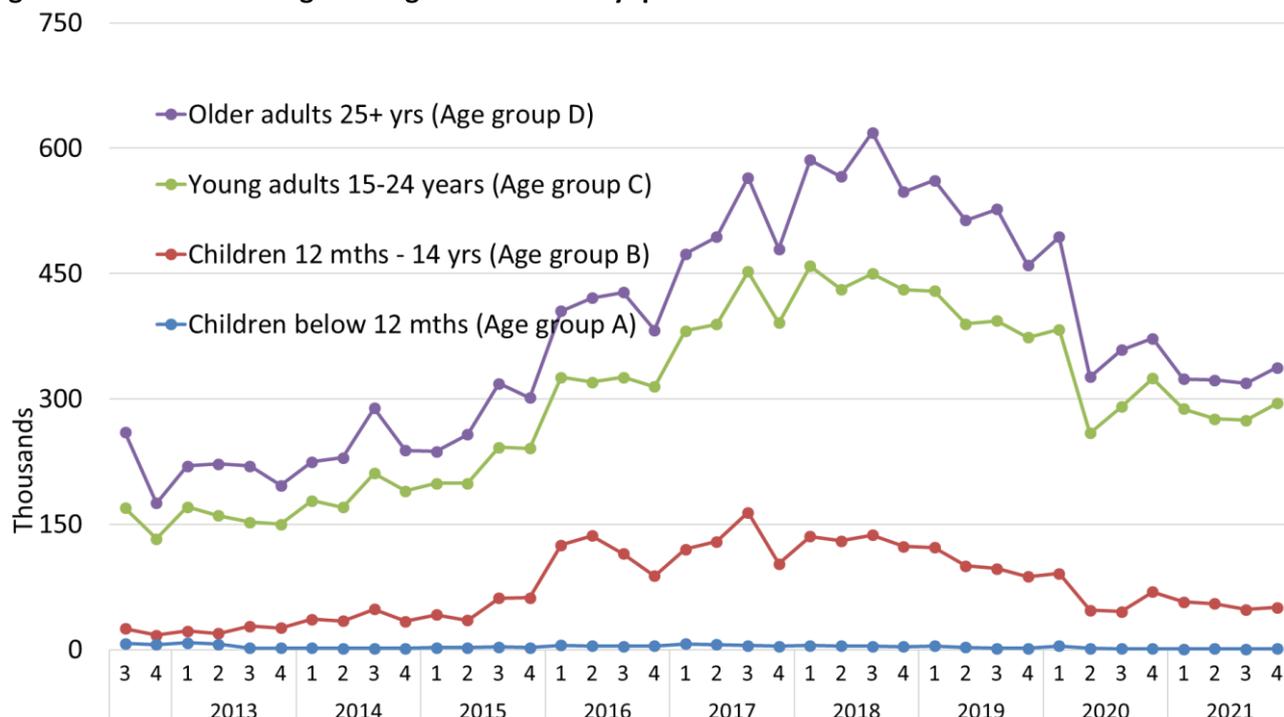


Figure 3: Distribution of age among clients tested by quarter



5.5 First-time, repeat and confirmatory test results

All HIV positive patients enrolled in care need a confirmatory HIV test to rule out any possibility of mix-up of test results or fraudulent access to ART. Confirmatory testing is done when starting ART. National guidelines require a confirmatory DNA-PCR at the time of starting ART for all children under 24 months, regardless if the initial diagnosis was based on a positive DNA-PCR or a rapid antibody test. Follow-up rapid antibody testing for children is no longer recommended.

125,567 (18%) of all clients tested accessed testing for the first time and **535,955 (82%)** were repeat testers. Based on the cumulative number of people who accessed HTC for the first time, a total of **12,578,880** people have been tested since introduction of the *first time HTC access* indicator in July 2007. The classification of first-time and repeat testers is likely to be affected by misreporting and non-disclosure of previous diagnoses.

19,453 (3.0%) out of all clients were recorded as receiving a positive result for the first time, but it is assumed that about half of these may be undisclosed repeat diagnoses (see above). Positive rapid test results among infants (**4**) and inconclusive test results (**26**) both accounted for **<1 %** of new results given to clients.

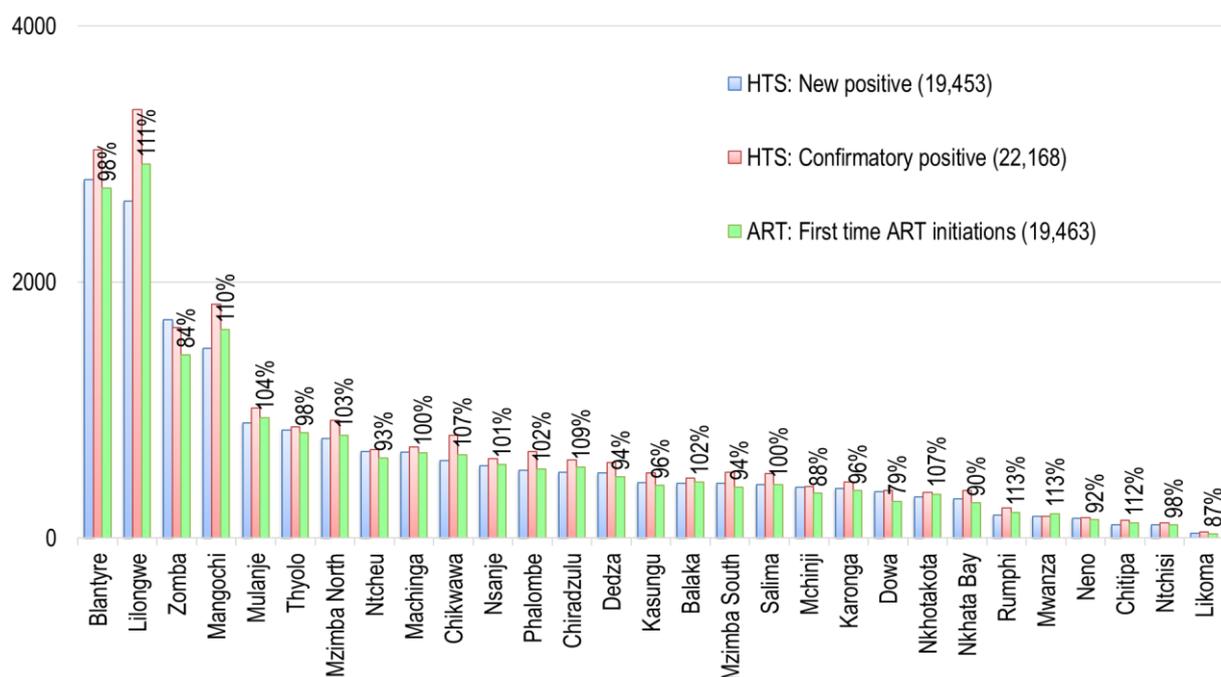
535,955 (96%) of 558,700 repeat testers reported a *last negative* result. **22,260 (4%)** were reported as *previous positives* and all of these should have been classified as receiving a confirmatory test. For most of these *previous positives*, testing was probably initiated by a health worker before ART initiation. As expected, the number of *confirmatory test results (22,260)* was very close to the number of previous positive clients. **22,168 (99%)** of 22,260 confirmatory test results were concordant positive and **92 (<1%)** were classified as *confirmatory inconclusive*. This category includes parallel concordant negative and discordant test outcomes (Determine HIV1/2 and Uni-Gold HIV1/2 are used in parallel for confirmatory testing). Clients who did not have a concordant positive confirmation may be explained by selective confirmatory testing among clients with doubts about their previous positive status, but it also underscores the importance of routine confirmatory testing before ART initiation and the need to strengthen quality assurance.

5.6 Linkage from HIV diagnosis to ART

Figure 4 shows a triangulation of HIV testing and ART program data by district. At the national level, the **19,463** patients who initiated ART this quarter represent **>99%** of the **19,453** clients tested positive for the first time. Proxy linkage rates ranged from 79% in Dowa to 113% in Rumphi. Blantyre had the highest number of new diagnoses (**2,802**) and ART initiations were at 2,735 implying a district-level linkage of **98%**. Very high or low linkage rates suggest that cross-border access to testing and ART was seen in several districts (e.g. Dowa, Blantyre, Likoma, Salima, Sanje etc.).

The number of confirmatory positives exceeded the number of new positives by 2,715 at the national level. This means a large number of clients who disclosed their previous positive status were getting tested again. Lilongwe recorded the greatest excess (713) of confirmatory positives compared with the number of new positives. Lilongwe, Blantyre, Mangochi, Phalombe, Chiradzulu, Mzimba North and Chikwawa accounted for **1,886 (69%)** out of the 2,715 excess confirmatory positives in the whole country this quarter. At the national level, the number of confirmatory positives exceeded the number of ART initiations by 2,705 (12%).

Figure 4: Number of new positives, confirmatory positives and new ART initiations in Q4 2021 by district (percentages represent ART initiations over new positives for each district)



5.7 HIV Self-Testing (HIVST)

The implementation of the National HIVST program started in December 2018 with an aim of facilitating access to HIV testing for hard-to-reach populations. Distribution of HIVST kits to index clients for secondary distribution to sexual partners is one important modality for index testing.

After a practical demonstration by a trained HIVST distributor, oral fluid self-tests are given to the end-user for self-testing or for onward distribution to a sexual partner, or any other person considered in need of HIV testing. HIVST may be done under supervision by an HTS provider but is most commonly done in private. Counselling includes information about the interpretation of test results and a reminder to seek confirmation of any positive HIVST result by a professional provider using the standard blood based rapid testing algorithm. The HIVST program does not attempt to capture results of self-testing but returning self-testing clients are recorded in a dedicated professional HIV testing register and a separate report is available for these (see below). Routine HST reports are limited to the attributes of the direct recipients and age and sex of the intended end-user.

5.7.1 HIV-Self Test Kits Recipients Details

Between October and December 2021, **130,070** people were counselled and given a total of **211,801** oral fluid self-test kits, either for self-use or for secondary distribution to sexual partners or others. This is equivalent to an average of 1.6 kits given to each recipient. **46%** of the 130,070 recipients were males and **54%** were females. **13%** of the females were pregnant.

Out of all recipients, **14,653 (11%)** had never been tested for HIV before and **115,417 (89%)** reported a previous test result. **113,007 (98%)** of previously tested recipients were negative and **2,381 (2%)** were positive. **2,041 (86%)** of the positives were on ART and **14%** were not

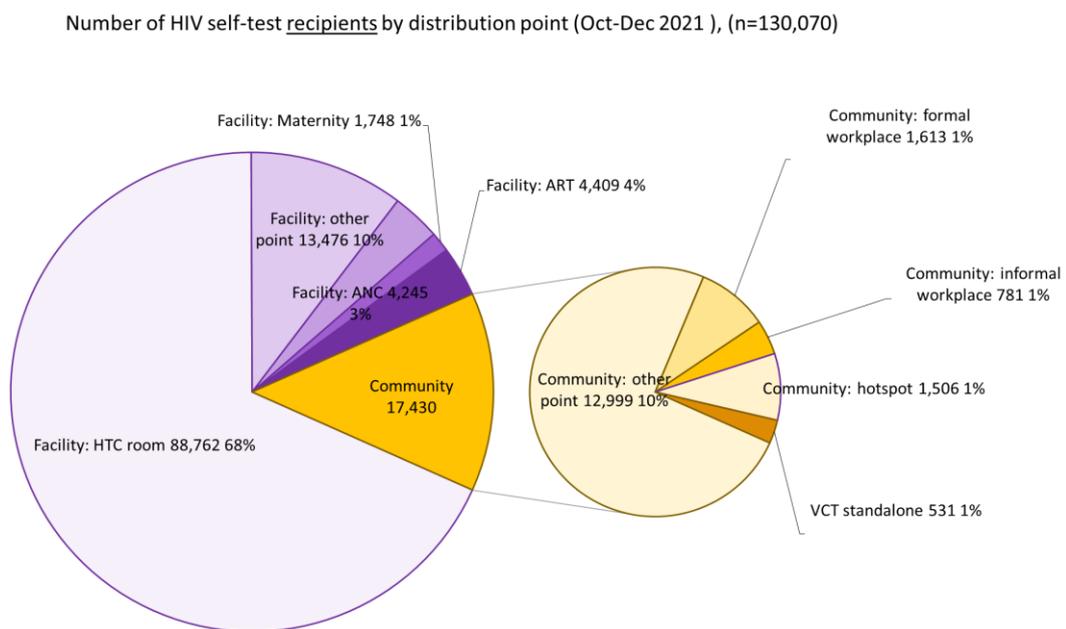
(yet) on ART. The **340** HIV positive recipients who were not yet on ART most likely received ST kits for their sexual partners in the context of index testing. **29 (<1%)** recipients reported an inconclusive previous test result.

5.7.2 Distribution Points of HIVST Kits

The national program recognizes 10 categories for HIVST distribution points. These are grouped under the three locations of **health facility** (ANC, maternity, ART clinic, HTC room, other), **stand-alone HTS site** (VCT) and **community** (formal workplace, informal workplace, hotspot, other). A dedicated distribution register is used for each type of distribution point and captures the details of recipients and the intended end users.

Figure 5 shows the number of recipients by distribution points in 2021 Q4. **112,640 (87%)** of all **130,070** recipients were seen at health facilities and **17,430 (13%)** in community settings. HTC rooms were the most common distribution point in facilities with **88,762 (68%)** recipients, followed by other facility points (**13,476**), ART clinics (**4,409**), ANC clinics (**4,245**) and Maternity (**1,748**). **12,999 (10%)** of clients received HIVST at unspecified community distribution points, **1,613 (1%)** were at formal workplaces, **781 (1%)** were at informal workplaces. VCT standalone and community hotspot accounted for 1% of the recipients.

Figure 5



5.7.3 HIVST Distributed Kits: Intended User Attributes

Out of the **211,801** HIVST kits distributed in Q4 2021, **107,165 (51%)** were intended for self-use by the recipients and **104,636 (49%)** were for onward distribution. **80,620 (77%)** of the kits intended for secondary distribution were for sexual partners and **24,016 (23%)** were for others, such as friends or relatives of the recipients. **Table 4** below summarizes the HIVST kits distributed by distribution point and the end-user type. This shows the majority of HIVST kits distributed at health facilities were for self-use which is a deviation from the intended goal of

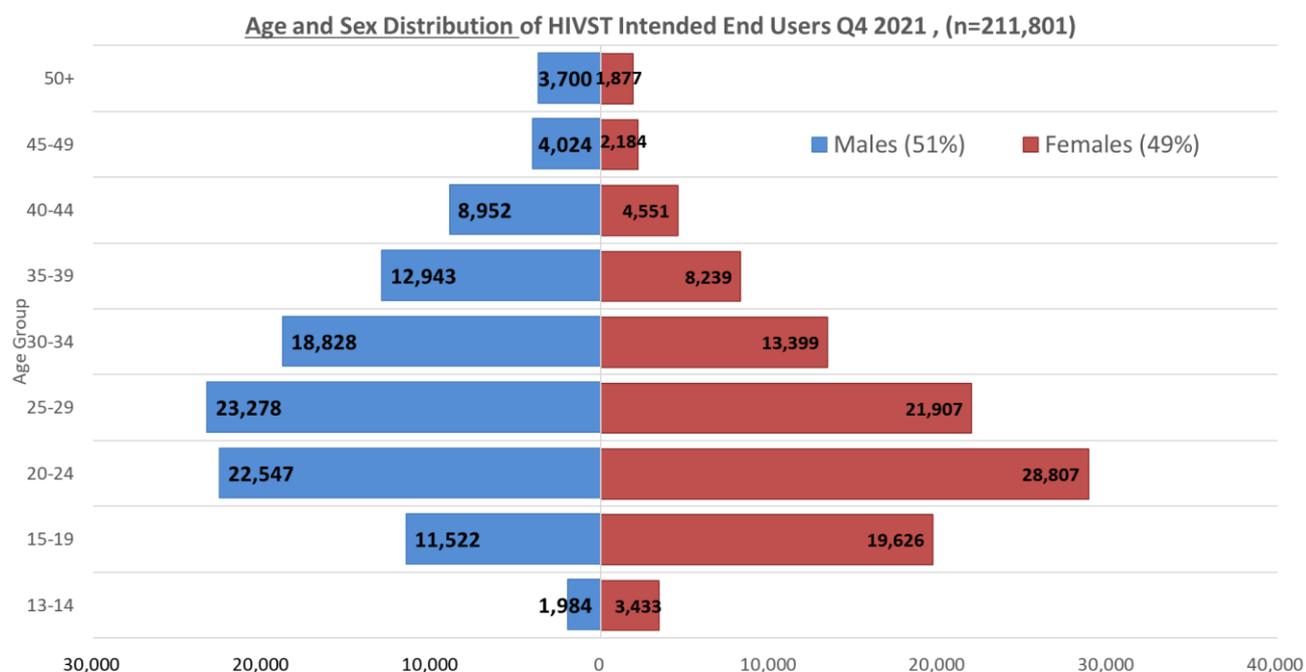
the HIVST programme in terms of targeting hard to reach populations who are not seen at health facilities.

Table 4

		End User Type						
		Self		Sexual Partner		Other		Total
Facility	HTC room	73,919	51%	55,964	38%	15,502	11%	145,385
	Other Point	11,085	51%	8,358	38%	2,394	11%	21,837
	ANC	1,697	26%	3,801	59%	948	15%	6,446
	Maternity	659	29%	1,591	69%	55	2%	2,305
	ART	3,085	32%	3,886	40%	2,684	28%	9,655
Community	Other Point	12,742	66%	4,732	25%	1,732	9%	19,206
	Formal workplace	1,479	63%	756	32%	116	5%	2,351
	Informal workplace	586	33%	766	43%	438	24%	1,790
	Hotspot	1,427	69%	520	25%	113	5%	2,060
	VCT standalone	486	63%	246	32%	34	4%	766
		107,165	51%	80,620	38%	24,016	11%	211,801

Figure 6 below shows the intended end user age and sex category for all the test kits that were distributed during 2021 Q4. Out of 211,801 test kits distributed, 104,023 (49%) were for males and 107,778 (51%) for females. 72% of the male end users were 20-39 years and 68% of females were 15-29 years

Figure 6



6 DNA-PCR testing for Early Diagnosis of HIV in Infants (EID)

DNA-PCR testing is performed at 10 labs (Mzuzu Central Hospital, Mzimba District Hospital, Kamuzu Central Hospital, Queen Elizabeth Central Hospital, DREAM Blantyre, DREAM Balaka, Tholo District Hospital, Zomba Central Hospital, Nsanje District Hospital and Partners in Hope, Lilongwe). HIV Diagnostic Assistants and EID counsellors collect infant blood samples as dried blood spots on filter paper. Health facilities are requested to fill a standard EID DNA-PCR logbook to document EID samples and to track results. The logbook includes the dates of collection, dispatch, receipt of result from the lab and communication of the result to the mother. Supervision teams were asked to collect basic data from these logbooks.

9,915 DNA PCR samples were drawn in the reporting period and documented in the facility DNA-PCR sample registers. **9,357 (94%)** of these were for the initial DNA-PCR test for exposed infant; **432 (4%)** were for the confirmatory testing of exposed children under 24 months when starting ART; **92 (<1%)** were for repeat DNA-PCR for patients whose previous collected samples did not produce a valid result, and **92(1%)** were tie-breaker samples after repeat-inconclusive rapid antibody testing.

8,724 (88%) of 8,910 samples were collected using Dried Blood Spot (DBS); **1,168 (12%)** were collected directly in the device cartridge for Point of Care Machines (POCs) and **23 (<1%)** were collected using other methods, e.g. plasma.

Results were received at the facility for 8,910 (**90%**) of the 9,915 samples collected; for **919 (9%)** of all samples the result missing or still pending 12 weeks after the samples were collected. **86 (<1%)** samples were rejected at the lab due to poor quality or analysis failure. **42%** of patients were notified of their result within 4 weeks of sample collection, **14%** were notified within 5-8 weeks and **3%** within 9-12 weeks. **4,087 (41%)** patients were either notified after 12 weeks or the notification was still pending. **8,890 (100%)** of 9,915 samples with results were conclusive and **86 (1%)** were inconclusive. Out of the conclusive test results, **8,574 (96%)** were negative and **316 (4%)** were positive.

The analysis for the **10 central PCR laboratories** was not possible for this report due to an error in the Lab Information Management System (LIMS) which led to many critical data gaps and misclassification of results.

7 Blood Safety

The Malawi Blood Transfusion Service (MBTS) is striving to provide safe blood products for the entire country using voluntary non-remunerated donors and quality assured screening for transfusion transmissible infections (TTIs). For the last years, MBTS has not been able to meet the 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 HIV program supervision teams were tasked with active collection of blood donor and cross-matching data from all visited health facilities. 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 **19,548** blood units were collected in Malawi during Q4 2021. MBTS collected **16,956 (87%)** of these, **100%** of which were screened comprehensively for the relevant TTIs (HIV, Hepatitis B, Hepatitis C, syphilis, malaria). In addition, **50** hospitals in Malawi collected a total of **2,592** units from replacement donors. **1,932 (75%)** of these units were screened for at least the 3 key TTIs (HIV, HepB and syphilis) and **1,878 (97%)** of these were also screened for HepC and malaria. This means that a total of **18,888 (97%)** 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, **570** were screened with any other combination of tests for TTIs.

A total of **3,933** potential replacement donors were documented in the blood donor registers at the facilities and **2,592 (66%)** 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 TTIs may have only been carried out for donors who passed the screening for more common conditions. In total, 79% of potential donors were tested for HIV, 79% for HepB, 78% for syphilis, 78% for malaria and 58% for HepC. Detailed data on outcomes of individual tests among all potential blood donors are presented in the Appendix

8 Preventive Services

8.1 Pre-Exposure Prophylaxis (PrEP)

PrEP roll-out has started at several implementing partner supported facilities in Q4 2020, and the supervision team included a review of PrEP client cards and registers for the first time this quarter. The reporting was affected by some gaps in the primary records and the data abstraction process. **124** sites had registered at least one client during 2021 Q4 reporting period.

8.1.1 Assessment of potential PrEP clients during Q4 2021

A total of 7,796 individuals were assessed for PrEP provision after a negative HIV test result in Q4 2021. **7,699 (99%)** were assessed for Acute HIV Infection (AHI) and **82 (1%)** of the 7,796 clients were suspected with AHI.

7,378 (95%) of 7,796 potential PrEP clients had their samples collected for creatinine clearance at the nearest lab. **617 (9%)** of the 7,378 clients had their results available by the end of December 2021. **25 (4%)** of 465 had a <60 ml/min clearance and were not eligible to be initiated on PrEP.

1,932 (25%) of 7,796 potential clients were tested for Hepatitis B and **49 (3%)** of the 1,932 clients had a positive Hep B test result, and these were supposed to be referred to Hepatitis B program for assessment before initiating PrEP.

626 (8%) of 7,796 assessed potential clients were not eligible and were excluded from proceeding to start PrEP. **56 (9%)** of the 626 clients were excluded based on the initial HIV positive result, **57 (9%)** had AHI suspicion, **499 (80%)** were assessed to have low HIV risk and **14 (2%)** had suspected kidney failure.

7,170 (92%) were eligible to start PrEP after the assessment and 6,596 (92%) out of 7,120 agreed to start PrEP. 574 (8%) refused to start PrEP due to various reasons.

8.1.2 PrEP Registrations during Q4 2021

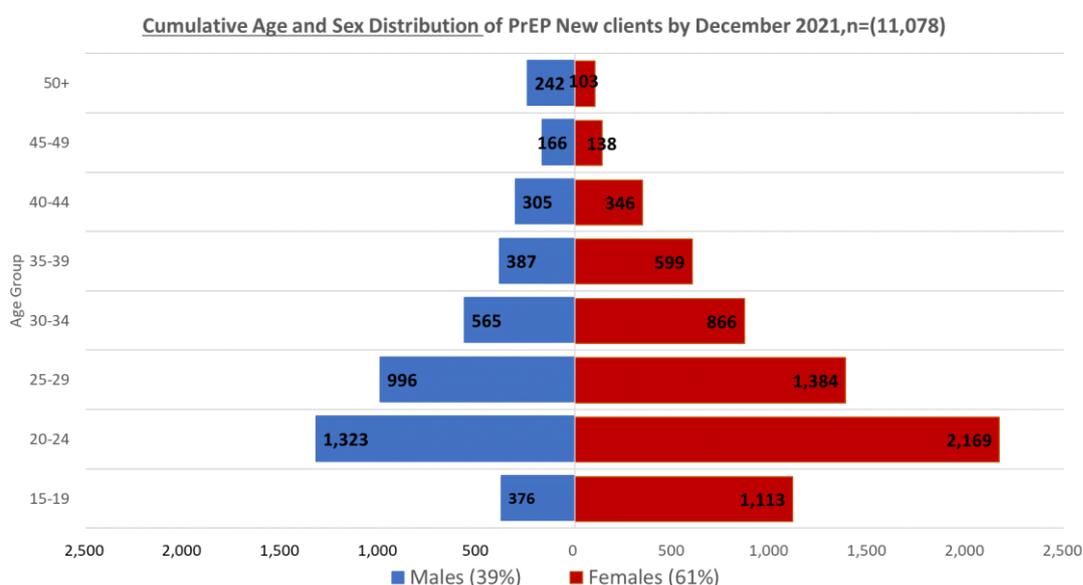
Out of 6,502 people enrolled to start PrEP, 43% were males and 57% were females. 50% of males were circumcised and 11% of the females were pregnant and breastfeeding. The 6,502 PrEP registrations include the 6,419 (99%) clients newly initiating PrEP, but also 32 (<1%) clients previously started on PrEP who transferred between sites and 51 (<1%) clients who re-initiated PrEP after dose interruption.

8.1.3 Cumulative PrEP Registrations up to December 2021

By the end of December 2021, there were a cumulative total of 17,086 PrEP clinic registrations, 16,756 (98%) of whom were patients newly initiated on PrEP; 79 (<1%) were patients who transferred between clinics; 251 (1%) re-initiated PrEP after dose interruption. Out of all registrations, 39% were males and 61% were females.

Figure 7 below shows the distribution of all the cumulative PrEP new initiations by end of December 2021. Out of 11,078 cumulative new PrEP clients, 4,360 (39%) were for males and 6,718 (61%) for females. 39% of the males were adolescent boys and young men 15-24 years and 61% were adults 25+ years. 3,282 (49%) of 6,718 of the females were adolescent girls and young women 15-24 years and 51% were adults 25+

Figure 7



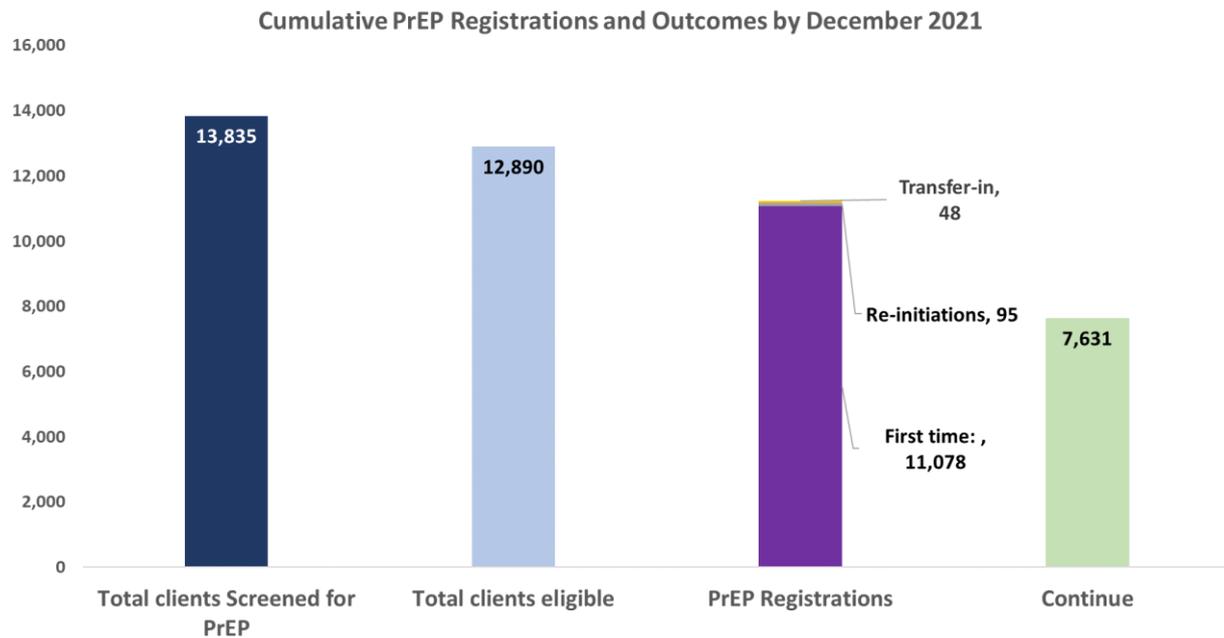
8.1.4 PrEP Cascade by end of December 2021

Figure 8 below shows the PrEP cascade with the cumulative registrations and outcomes. Out of the 13,835 clients who were cumulatively assessed for PrEP, 12,890 (93%) were eligible to start PrEP. 945 (7%) clients were not eligible and were excluded from receiving PrEP¹⁰. Out of

¹⁰ The 157 excluded non-eligible clients include 82 (52%) with low HIV risk, 60 (38%) with initial HIV positive result, 12 (8%) with suspected acute HIV infection and 3 (2%) with suspected kidney failure

the 12,890 eligible clients, **11,221 (87%)** were enrolled on PrEP out of which **11,078 (99%)** were newly initiated, **143 (1%)** were re-initiations and transfer-ins on PrEP . **7,631 (68%)** clients were retained on PrEP by the end of December 2021

Figure 8



8.1.5 PrEP primary follow -up outcomes

Out of the 12,890 individuals ever initiated on PrEP, **7,631 (68%)** were retained on PrEP, **2,212 (21%)** were lost to follow-up and **21 (<1%)** were known to seroconverted ,**125 (2%)** were advised to stop by the provider due to low HIV risk after follow-up visit assessment, **286 (4%)** had quit PrEP. None of the clients initiated on PrEP were known to have died.

8.2 Post Exposure Prophylaxis (PEP)

A total of **4,491** persons received PEP during Q4 2021. This is a 8% decrease from the previous quarter (4,861).

8.3 Provider-Initiated Family Planning (PIFP)

The Integrated Clinical HIV Guidelines encourage health workers to routinely provide condoms to all adults in ART clinics. Women should also be offered at least the standard injectable contraceptive (Depo-Provera) at any ART visit. This policy aims to address the significant unmet need for family 2 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 ART clinics during the last quarter. The report does not account for family planning need, nor does it include women who accessed family planning services outside of HIV clinics.

Table 5 shows that **57,605 (12%)** of 466,131 women received Depo-Provera from ART clinics in Q4 2021. Patient coverage has decreased from last quarter's 16%. **562 (72%)** of 783 ART/PMTCT sites had stocks of Depo-Provera in July 2021. This is an increase from the 416

sites with stocks in October 2021.¹¹ The HIV Program is no longer supplementing FP supplies through procurement and distribution of additional Depo-Provera to sites.

8.4 Cotrimoxazole Preventive Therapy (CPT) and hypertension screening

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 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, so the targeted CPT coverage is around 93%.

Table 5 shows that **640,481 (71%)** of 898,132 patients on ART were on CPT. Coverage was highest in Central East zone at **85%**.

699,645 (78%) of 898,132 patients on ART were estimated to be 30 years or older. National guidelines require screening for hypertension for all adults (30 years +) at the time of ART initiation and annually thereafter. **153,321 (22%)** of 699,645 were screened for hypertension at least once in 2021.

8.5 TB Preventive Therapy (TPT)

Following on from the 2016 policy of providing continuous isoniazid preventive therapy (IPT in the 5 districts with the highest TB burden (Lilongwe, Blantyre, Chiradzulu, Thyolo, Zomba) the national roll-out of a limited course of TPT for patients in all districts was started from 2019. The 2019 guideline addendum provides TPT for all new and existing patients on ART who have not previously completed at least 6 months of IPT. Implementation was planned in two phases to utilize remaining stocks of isoniazid and bridge the period until sufficient stocks of rifapentine were available in country to transition to the short course 3HP regimen (12 weekly doses of isoniazid and rifapentine).

In line with this policy change, the programme is now also collecting data on number of ART patients newly started on IPT in each quarter. A total of **17,804** were newly started on TPT during Q4 2021. **11,651 (64%)** of these received a single 6-month course of isoniazid and pyridoxine (6H) and **6,153 (35%)** were given 12 weekly doses of isoniazid and rifapentine (3HP). Data on TPT completion will be available from the next quarters.

¹¹ Many Mission hospitals do not provide family planning.

Table 5

Zone District	Patients on ART (all)			Women (18-49) on ART			Adults (30+) on ART		
	Total	On CPT		Total	Given FP*		Total	BP screened**	
Malawi (National)	878,232	621,202	71%	455,802	56,630	12%	684,143	148,022	22%
Northern Zone	85,698	62,085	72%	44,477	4,668	10%	66,759	17,751	27%
Chitipa	5,882	4,862	86%	2,949	294	10%	4,426	2,127	48%
Karonga	15,068	8,599	57%	7,820	742	9%	11,738	3,538	30%
Nkhata Bay	11,487	10,095	88%	5,962	724	12%	8,948	793	9%
Rumphi	8,659	5,088	59%	4,494	267	6%	6,745	204	3%
Mzimba North	27,109	18,132	67%	14,070	1,825	13%	21,118	7,357	35%
Mzimba South	16,828	14,452	86%	8,734	779	9%	13,109	3,136	24%
Likoma	865	856	99%	449	37	8%	674	596	88%
Central East Zone	68,454	51,941	76%	35,528	4,599	13%	53,326	7,967	15%
Nkhotakota	13,464	10,306	77%	6,988	440	6%	10,488	680	6%
Kasungu	18,616	11,225	60%	9,662	796	8%	14,502	3,344	23%
Ntchisi	4,942	4,795	97%	2,565	245	10%	3,850	861	22%
Dowa	13,542	10,526	78%	7,028	1,917	27%	10,549	1,652	16%
Salima	17,890	15,089	84%	9,285	1,201	13%	13,936	1,430	10%
Central West Zone	182,007	136,669	75%	94,462	14,385	15%	141,783	46,796	33%
Lilongwe	112,624	79,191	70%	58,452	11,554	20%	87,734	33,605	38%
Mchinji	18,664	14,536	78%	9,687	1,471	15%	14,539	4,780	33%
Dedza	21,553	18,519	86%	11,186	199	2%	16,790	3,616	22%
Ntcheu	29,166	24,424	84%	15,137	1,162	8%	22,720	4,796	21%
South West Zone	275,645	199,081	72%	143,060	18,225	13%	214,727	40,438	19%
Chiradzulu	42,411	24,542	58%	22,011	1,275	6%	33,038	4,190	13%
Blantyre	105,266	76,873	73%	54,633	4,937	9%	82,002	15,840	19%
Mwanza	6,868	4,744	69%	3,564	801	22%	5,350	2,075	39%
Thyolo	57,977	40,817	70%	30,090	4,224	14%	45,164	4,136	9%
Chikwawa	30,771	25,169	82%	15,970	3,267	20%	23,971	3,825	16%
Nsanje	23,292	18,146	78%	12,089	2,842	24%	18,144	3,699	20%
Neno	9,060	8,789	97%	4,702	879	19%	7,058	6,673	95%
South East Zone	266,428	171,426	64%	138,276	14,753	11%	207,547	35,069	17%
Mangochi	56,017	43,395	77%	29,073	1,677	6%	43,637	6,450	15%
Machinga	32,271	20,596	64%	16,749	1,948	12%	25,139	3,312	13%
Zomba	61,476	34,671	56%	31,906	3,305	10%	47,890	9,959	21%
Mulanje	58,687	37,428	64%	30,459	3,871	13%	45,717	6,773	15%
Phalombe	35,182	20,167	57%	18,259	2,551	14%	27,407	3,381	12%
Balaka	22,795	15,169	67%	11,831	1,401	12%	17,757	5,194	29%

* Given FP: Number of women (18-49 years) on ART who received a modern family planning method from their ART clinic in the reporting period.

** BP screened: Number of adults (30 years +) who had at least one blood pressure reading recorded on their patient card this calendar year.

8.6 Intensified TB 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, 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 exposed child follow-up.

890,388 (99%) of all patients retained on ART were screened for TB at their last visit before end of December 2021. Out of these, **2,890 (<1%)** patients were classified as new TB suspects. **3,013 (<1%)** patients were confirmed to have TB (clinical or lab based) and **2,903 (96%)** of these were on TB treatment; the remaining 41 had either not yet started or 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)	7,744	1%
ICF done	890,388	99%
TB not suspected	884,485	99%
TB suspected	2,890	0%
TB confirmed	3,013	0%
TB confirmed, not on treatment	110	4%
TB confirmed, on TB treatment	2,903	96%

8.7 HIV-Related Diseases

Table 6 shows the number of patients treated for key HIV-related indicator diseases. **3,760** patients were started on TB treatment this quarter and HIV status was ascertained for **3,724 (99%)**; **1,701 (46%)** of these were HIV positive and **1,567 (92%)** of all HIV positives were already on ART when starting TB treatment. 70 patients with Kaposi sarcoma were registered for ART in this quarter.

Table 6

Number new cases of key HIV-related diseases registered per quarter (KS = Kaposi Sarcoma)

	TB				KS *
	Tot cases	HIV status asc.	HIV positive	Already on ART	Tot cases
2021 Q1	3,334	3,331 100%	1,427 43%	1,410 99%	70
2021 Q2	3,760	3,724 99%	1,701 46%	1,567 92%	70
2021 Q3	3,474	3,466 100%	1,498 43%	1,434 96%	74
2021 Q4	3,817	3,772 99%	1,670 44%	1,557 93%	92

9 HIV-Exposed Child Follow-Up

9.1 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.

9.2 HIV Exposed Child Registration Data

11,247 HIV exposed children were newly enrolled into follow-up during Q4 2021; **10,186 (80%)** of these were under the age of 2 months. The total number of new enrolments (11,247) exceeds by 3,782 (33%) the total number of known HIV exposed children discharged from maternity (7,465). 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.

9.3 Birth Cohort Outcomes

There were **9,631** infants in the **2-month age cohort**. **7,290 (76%)** had received a DNA-PCR result. **84 (1%)** of these were confirmed HIV infected. For the first time we did not have any infant with *presumed severe HIV disease (PHSD)*, which means that a total of 84 infants were eligible for ART. All 84 infants had started ART which represents 100%. Out of the entire 2-month age cohort, **8,106 (94%)** were retained in exposed child follow-up, **84 (1%)** had started

ART and 58 (1%) were discharged confirmed uninfected¹². 26 (0%) were known to have died and 349 (4%) had been lost to follow-up.

There were 11,760 children in the 12-month age cohort. Current HIV infection status was known for 9,129 (78%) children (DNA-PCR or rapid antibody test) and 136 (1%) of these were confirmed HIV infected. 3 (<1%) additional children had been diagnosed with *presumed severe HIV disease*, which means that a total of 139 children were eligible for ART. 138 (99%) had started ART. Out of the entire age cohort, 9,053 (86%) were retained in exposed child follow-up, 138 (1%) had started ART and 125 (1%) were discharged confirmed uninfected.¹² 1,074 (10%) were lost to follow-up and 84 (1%) were known to have died.

There were 12,714 children in the 24-month age cohort. Current HIV infection status was known for 8,662 (70%) children (DNA-PCR or rapid antibody test) and 206 (2%) of these were confirmed HIV infected. 4 additional children had been diagnosed with *presumed severe HIV disease*, which means that a total of 258 children were eligible for ART. 208 (99%) of these had started ART. Out of the entire age cohort, 414 (2%) were retained in exposed child follow-up, 208 (2%) had started ART and 8,218 (75%) were discharged confirmed uninfected. 1,954 (18%) were lost to follow-up and 149(1%) were known to have died.

Confirmed HIV-free survival at age 24 months in this quarter was 75%. This was related to the fact that only 70% in this cohort had a known HIV status. 3,846 (30%) children were classified as 'current HIV infection status unknown' and many of these may be among the 1,954 children lost to follow-up and the 149 children who had died. Only 414 (4%) 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. Much progress has been made with scheduled HIV testing (and documentation of test results) at 6 weeks, 12 and 24 months of age.

10 PMTCT / ART

The implementation of **PMTCT Option B+** effectively integrated PMTCT and ART services already in 2011. 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.

10.1 Data Sources and Reporting Methods

New standard M&E tools for ANC and maternity were implemented in January 2010 and revised in Q2 2012 to reflect the Option B+ policy. ANC and maternity clinic registers and reporting forms include patient management information and all relevant data elements for 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

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

completed their ANC visits. The outcome report is completed for women who started ANC 6 months before the reporting period.

From **Q2 2015**, the PMTCT data elements (HIV ascertainment and ART status) were also added to the first section of ANC reporting form that captures women's status at their first (booking) visit. The ANC report now includes the HIV and ART status at the first visit for women starting ANC in the reporting period and the final HIV and ART status of women who had completed ANC by the end of the reporting period. This addition aims to monitor PMTCT service implementation more closely in time, allowing for corrective action in the course of subsequent 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.

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 getting pregnant. Implementation of *Test & Treat* will further increase ART coverage in this group. **Maternal ART coverage** is estimated from the number of pregnant women who were already on ART when getting pregnant (**maternity reports**) plus those who newly started ART when pregnant (**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 97% 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 the known HIV infected women deliver at health facilities.

Between 2011 and 2020, ART coverage before pregnancy was based on maternity reports. However, there have been repeated observations during supervision that women who started ART during pregnancy were systematically misclassified as "already on ART when getting pregnant" at maternity, leading to a potential overcount. Due to the very high ART coverage rates achieved in Malawi, this overcount has also become apparent in the previous Spectrum model estimates for maternal PMTCT coverage that exceeded 100%. From 2021, the number of women who had started ART before pregnancy is based on the data element "already on ART when starting ANC" in the ANC service reports. This new method has also been used in the 2021 Spectrum model estimates for PMTCT coverage.

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 become pregnant after starting ART. For the estimation of maternal ART coverage, the number of women starting ART in pregnancy is **adjusted for**:

a) Double counting of women starting ART in pregnancy and subsequently transferring to another site. These women are counted multiple times as ‘pregnant at the time of starting ART’ in the quarterly ART cohort reports because the disaggregation of age, sex and reason for starting ART applies to all patients newly registered in the quarter, including transfers in. Separate *ART ‘survival’ analyses* are collected each quarter for women started under Option B+. The proportion of women transferred within 12 months of registration is used to adjust the quarterly number of pregnant women starting ART for transfers.

b) Failed ART initiation is thought to be the main underlying reason for early loss to follow-up among the Option B+ cohort. Patients are recorded on patient cards and in clinic registers when the first supply of ARVs is dispensed and all new entrants are counted as ART initiations in the quarterly ART cohort report. Recent operational studies indicate that most pregnant women lost to follow-up within the first 6 months never return after this first dispensing visit and many of these may have never actually started taking ART. The proportion of women lost to follow-up in the 6-month survival analysis is therefore used to adjust the number of pregnant women starting ART in the quarterly ART cohort reports for *failed initiations*.

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.

Coverage is calculated by dividing the number of patients served by population denominators. The denominators are derived from expected pregnancies based on population projections and HIV prevalence from epidemiological surveillance (source: Spectrum model for Malawi). There are an estimated 9,798 HIV infected pregnant women in the population per quarter (1/4 of 39,191 in 2021).¹³

10.2 ARV Coverage among Pregnant / Breastfeeding Women and Exposed Infants

9,001 (92%) of the estimated 9,798 HIV infected pregnant women in Malawi this quarter were on ART. This is based on **6,314** women were already on ART when starting ANC and **2,687**¹⁴ women who newly initiated ART in pregnancy. ART coverage was similar in the previous quarter (>99%).

¹³ 2022 Spectrum model estimates for HIV infected pregnant women in 2021.

¹⁴ 3,688 women registered at ART clinics who were pregnant at the time of starting ART; a) 18.0% are discounted to adjust for double-counting of transfers based on 841 of 4,661 women who transferred within 12 months of registration (12-month Option B+ survival analysis); b) 11.1% are discounted to account for presumed failed ART initiations based on 395 of 3,558 women lost to follow-up within 6 months of registration (6-month Option B+ survival analysis).

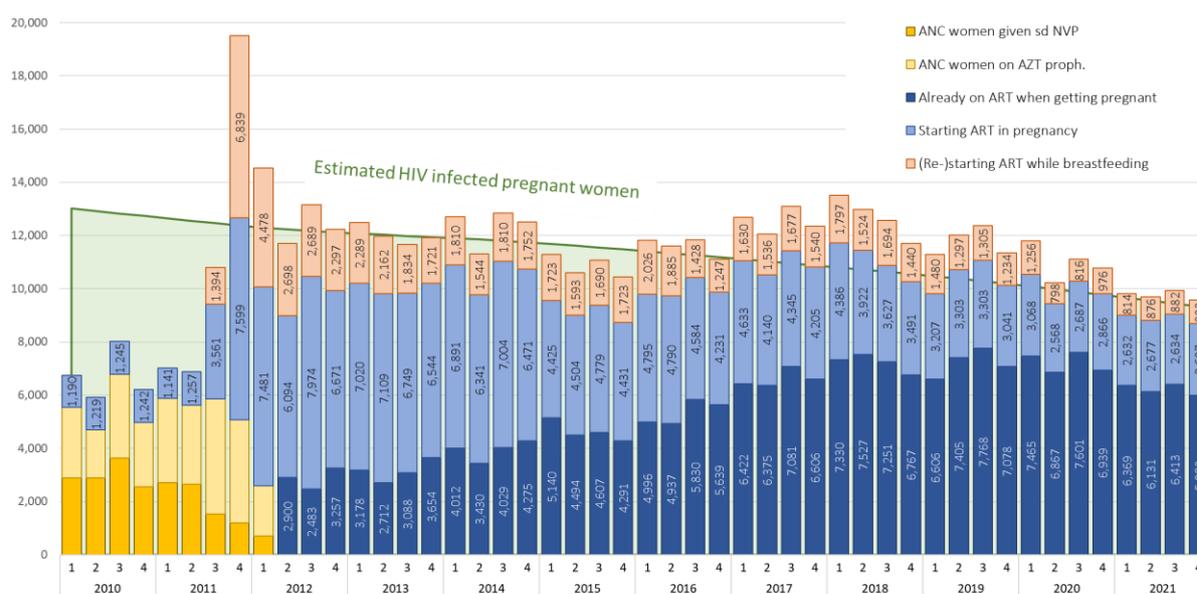
An additional **883**¹⁵ breastfeeding women started ART while breastfeeding (in WHO clinical stage 1 or 2), bringing the total number newly started on ART while pregnant or breastfeeding to **4,571**. Most women starting ART while breastfeeding were probably identified late in maternity or early in the postnatal period, but this group may also include some women who re-initiated after interrupting ART in pregnancy. **7,465 infants** were confirmed to have started NVP prophylaxis at maternity.

Figure 9 shows the estimated maternal PMTCT coverage between 2010 and the current quarter. All program data have been adjusted for potential double-counting of women who attended more than one ANC clinic in the course of pregnancy, transfers between ART clinics and misclassification of women who initiated ART in pregnancy but were not retained at 6 months after the initiation visit (presumed “failed ART initiations”). The (less effective) single dose NVP regimen and AZT combination prophylaxis had been phased out by April 2012. The average number of pregnant women registered for ART each quarter **increased almost 6-fold** from **1,221** in the 12-month period before introduction of Option B+ to an average of around **6,500** since Q4 2011.

Figure 9

Maternal PMTCT coverage 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. ANC and ART data adjusted for double counting from patients attending more than one clinic. ART data adjusted for ‘failed initiations’ among pregnant women with no 2nd ART visit.



10.3 HIV Services at ANC

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

¹⁵ 883 women registered at ART clinics who were breastfeeding at the time of starting ART; reduced by 18.0% to adjust for double-counting of transfers based on 841 of 4,661 women who transferred within 12 months of registration (12-month Option B+ survival analysis). Failed ART initiations are thought to be less common among this group, so no further adjustment is made.

10.3.1 HIV Ascertainment and ART Coverage

Booking cohort:

164,803 women attended ANC for their first visit between October and December 2021. This is slightly higher than the estimated 159,536 pregnant women in the 2021 population during one quarter.¹⁶ **157,139 (95%)** of women in this cohort had their HIV status ascertained at the first visit. Out of these, **7,714 (5%)** presented with a valid previous test result and **149,425 (95%)** received a new test. A total of **8,367 (5%)** of women were found HIV positive: **6,366 (76%)** of these from a documented previous test and **2,0017(24%)** from a new test. **8,239 (99%)** of all positives received ART: **6,314 (77%)** of these were already on ART when starting ANC; **1,744 (21%)** initiated ART at their first ANC visit and **181(2%)** started late at 28 + weeks during pregnancy.

Outcome cohort:

156,579 women had started ANC between April and June 2021 and their outcomes were reported between October and December 2021.

153,720 (98%) of the outcome cohort had their HIV status ascertained at least once in the course of ANC. **8,516 (5%)** presented with a valid documented previous HIV test result and **149,047 (95%)** received a new HIV test result at ANC. A total of **9,100 (6%)** women were found HIV positive. This is slightly higher than the latest Spectrum projections (5.9% HIV prevalence among pregnant women in 2021).¹³

9,046 (99%) of (known) HIV infected women were on ART by the end of ANC. This represents **92%** coverage of the estimated 9,798 HIV positive pregnant women per quarter at the population level. Of the **9,046** ANC women who were known to receive ART **6,852 (76%)** were already on ART when starting ANC, **1,947(22%)** initiated before 28 weeks of pregnancy and **247 (2%)** initiated during the last trimester of pregnancy. **9,019 (>99%)** of HIV infected women at ANC were on Cotrimoxazole Preventive Therapy. **8,972 (99%)** of known HIV infected women attending ANC received the infant dose of ARVs (nevirapine syrup) to take home.

10.3.2 Syphilis Screening

112,897 (72%) of women in the outcome cohort were tested for syphilis and **2,585 (2%)** were syphilis positive. The syphilis testing rate was lower than last quarter's performance of 8%

10.4 HIV Services at Maternity

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

Between October and December, **144,231** women were admitted for delivery to maternity; **8,871** of these were referred to another facility before delivery, resulting in **135,360** total admissions to maternity.

A total of **138,013** babies were born, **133,299 (97%)** were singletons and **4,714 (3%)** were twins/multiples. There were **135,309 (98%)** live births and **2,704 (2%)** stillbirths. **134,405(99%)** of babies born alive were discharged alive and **904(1%)** died before discharge.

¹⁶ Estimated as ¼ of 638,145 births projected for 2021 (Demographic Projection from Spectrum 2021).

10.4.1 HIV Ascertainment at Maternity

135,464 (9%) women had their HIV status ascertained at maternity. Out of these, **8,084 (6%)** presented with a valid previous HIV test result and **127,380 (94%)** received a new test. A total of **8,290 (6%)** women were HIV positive and **8,084 (97%)** of these had been previously diagnosed while **207 (3%)** received a new positive result at maternity. The **135,464** women whose HIV status was ascertained at maternity represent **8%** of the expected 159,536 women delivering in the population.

HIV exposure status was ascertained for **129,612 (97%)** out of **134,405** babies born and discharged alive. **7,747(6%)** of these were born to a known HIV positive mother.

10.4.2 ARV Coverage at Maternity

A total of **8,290 (100%)** of known HIV infected women admitted to maternity received ART. Out of these, **7,948 (96%)** had started ART before pregnancy, **169 (2%)** initiated ART during the 1st or 2nd trimester, **72 (1%)** initiated during the 3rd trimester and **101 (1%)** initiated ART at maternity.

A total of **7,465 (96%)** of 7,747 infants who were known HIV exposed and discharged alive started daily NVP prophylaxis at maternity. This represents 76% coverage of the estimated 9,798 HIV exposed infants born in the population in this quarter.

11 ART Access and Follow-Up Outcomes

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

11.1 New ART Registrations during Q4 2021

By the end of December 2021, there were 783 static ART sites in Malawi. 63% of these sites were managed by government, 19% by CHAM, 5% by NGOs and 13% were private sector clinics that charge a nominal fee of MK500 per monthly prescription of drugs per patient.

Implementation of the Malawi Integrated Clinical HIV Guidelines, which adopted Option B+, started in July 2011, triggering a massive surge in new ART initiations (see Error! Reference source not found.). The new policy for universal ART eligibility (“**Test & Treat**”) was introduced in **May 2016**. This policy led to an unprecedented, transient increase in ART initiations in Q3 2016 when almost all remaining pre-ART patients-initiated ART.

A total of **19,463** initiated ART for the first time in Q4 2021. From 2019 Q1, routine reporting during supportive supervision has included a disaggregation of first-time initiations by sex and pregnancy status. In Q4 2021, **19,425 (>99%)** out of 19,463 first time initiations were disaggregated by sex and pregnancy. Among these, **41%** were males and **59%** were females. Total number of pregnant women amongst first time initiating females was **2,635 (23%)**.

The total number of patients newly initiated on ART represents **>99%** of the 19,453 people recorded as newly diagnosed with HIV during the quarter. Among all new ART clinic

registrations¹⁷ in Q4 2021, **38%** were males and **62%** were females. **3,764 (19%)** of the registered females were pregnant at the time of starting ART.

A total of **28,019 (88 %)** of all patients registered started in WHO stage 1 or 2 and **20,486 (81%)** of these started as 'asymptomatic' under universal ART eligibility policy. **2,697 (9%)** of patients registered started in WHO stage 3 and **888 (3%)** started in stage four. **29 (<1)** had no documented clinical stage at initiation.

1,913 children were registered at ART sites in Q4 2021. **360 (19%)** of these were children aged 12-59 months in WHO stage 1 or 2. **18 (<1%)** infants started ART with presumed severe HIV disease. **105** infants in WHO stage 1 or 2 started due to confirmed HIV infection through DNA-PCR. Early infant treatment has remained at about half of the estimated infected infants seen at maternity: considering that 7,747 HIV exposed infants were identified at maternity and assuming a 2% transmission rate among the 96% of HIV positive mothers at maternity who received ART (and 20% transmission in the 4% who did not receive ART)¹⁸, only about 211 of these known HIV exposed infants may have been infected perinatally during Q4 2021. However, considering the projected 454 new infant HIV infections in the 2021 population per quarter¹⁹, early infant treatment coverage remains low at an estimated **46%** (211/454). The most significant bottleneck for early infant treatment remains the identification of HIV (probably mostly recently) infected pregnant / breastfeeding women.

571 (2%) out of all ART clinic registrations were patients with TB: **418 (73%)** had a current and **240 (27%)** recent history of TB. **92 (<1%)** of patients registered had Kaposi's sarcoma.

11.2 Cumulative ART Registrations up to December 2021

By the end of December 2021, there were a cumulative total of **1,988,244 ART** clinic registrations, **1,567,716 (79%)** of whom were patients newly initiated on ART; **393,579 (20%)** were patients who transferred between clinics; **26,949 (1%)** re-initiated ART after treatment interruption. Out of all registrations, **37%** were males and **63%** were females, **92%** were adults and **8%** were children (<15 years).

11.3 ART Outcomes

898,132 patients were alive on ART by the end of December 2021. This is equivalent to **91% ART coverage** among the estimated 986,240 HIV positive population in Malawi in 2021 and it means that the revised national ART scale-up target²⁰ for December 2021 (89% coverage) has been achieved.

¹⁷ These proportions include the 19,463 patients newly initiating ART, but also 12,243 patients previously started on ART who transferred between sites and 260 patients who re-initiated ART after treatment interruption.

¹⁸ UNAIDS Reference Group on Estimates Modelling and Projections (2011). Working paper on mother-to-child-transmission rates for use in Spectrum. Geneva, UNAIDS.

¹⁹ ¼ of the 1,817 estimated new infant infections in the population in 2021 (2021 Malawi Spectrum model)

²⁰ End of 2019 baseline and subsequent targets from the 2020-2025 National Strategic Plan for HIV.

Unlike in previous quarters, an adjustment for patients who were in transit between sites by the end of the quarter cannot be made due to the large-scale reclassification of registration status and outcomes in the context of active tracing initiatives described below.

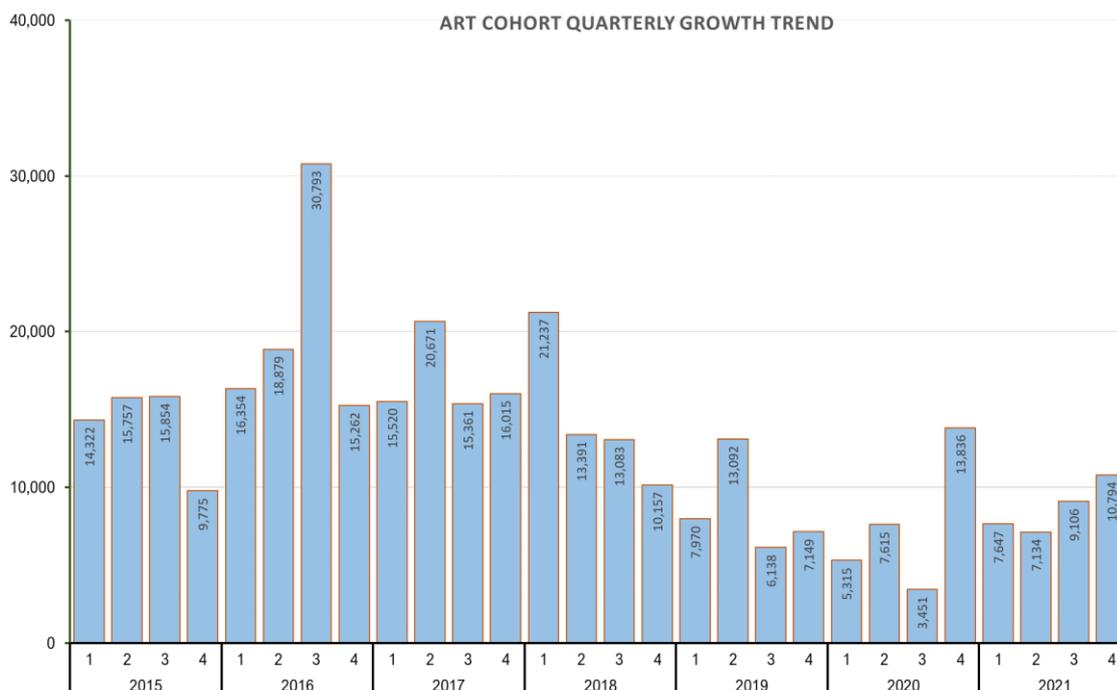
Out of the 1,988,244 patients ever initiated on ART, **898,132 (46%)** were retained alive on ART, **141,120 (7%)** were known to have died, **427,158 (21%)** were lost to follow-up and **15,198 (<1%)** were known to have stopped ART.

An estimated **855,361** adults and **42,771** children (<15 years)²¹ were alive on ART by the end of December 2021. This represents **78%** (42,771/ 54,742) and **92 %** (855,361/ 931,499) ART coverage among children and adults, respectively.

11.3.1 ART Outcomes Trend

Figure 11 shows the net increase of patients alive on ART by the end of each quarter. The number of patients retained on ART increased by **10,794** between October and December 2021. This was 21% higher than the net growth in the previous quarter (9,106).

Figure 11



11.3.2 Differentiated Service Delivery (DSD)

Data on ART dispensing and appointment intervals was available for 739 (94%) of 783 ART sites with EMR (both PoC and eMastercard), covering **882,761 (98%)** of 898,132 patients retained alive on ART. Only **12%** of these received ARVs for less than 3 months (presumably as they had recently started ART or were unstable), **52%** for 3-5 months and **320,090 (36%)** received ARVs for ≥6 months. As a social distancing measure during Covid-19, the DHA recommended an enhanced implementation of 6-month ARV dispensing for almost all patient groups as one way of decongesting the facilities and in the last few quarters, the proportion

²¹ The total national number of ART patients with current age <15 years is extrapolated from the (4.8%) of all patients at EMR sites who were <15 years at the end of Q4 2021.

of patients on 6 months dispensation has reduced. **Figure** below shows the distribution of the 739 ART facilities by proportion of patients who were given 6 months ARVs at their last recent visit during Q4 2021. This shows that implementation of 6-month dispensing was widespread; **729 (99%)** of the 739 facilities had given ≥ 6 months of ARVs to more than half of their patients.

Figure 12 Number of ART sites by proportion of patients who received 6 months of ARVs at their last clinic visit

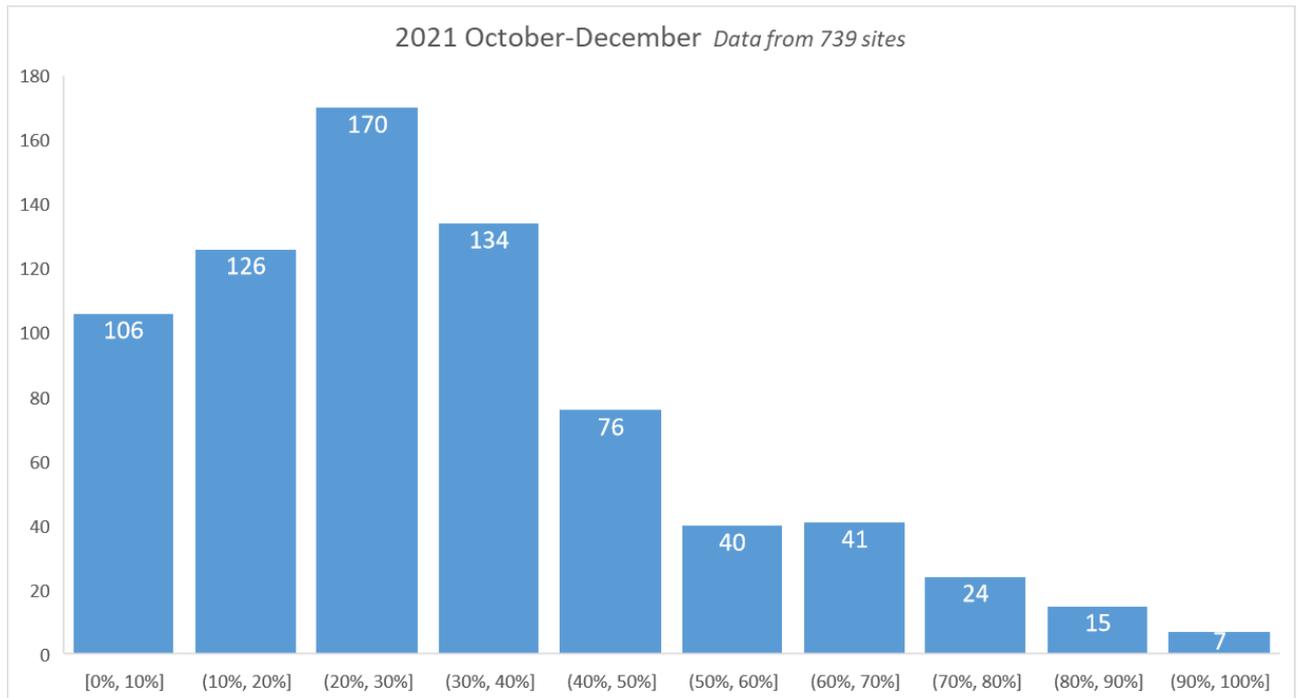


Figure 103 below shows the distribution of the ART dispensing and appointment intervals by district. Uptake of 6-month dispensing was highest in Neno at 26% and lowest in Phalombe at 7%.

Figure 10

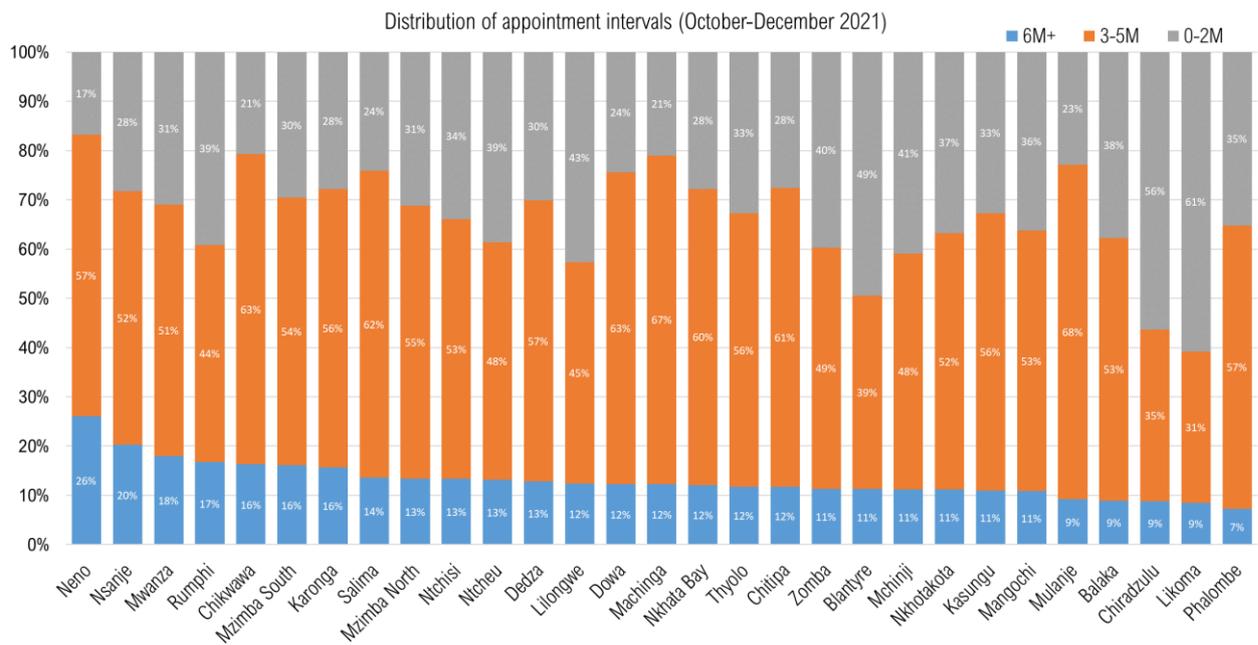


Figure 11: Patients alive on ART at the end of each quarter, stratified by size of facility (number of patients alive on ART)

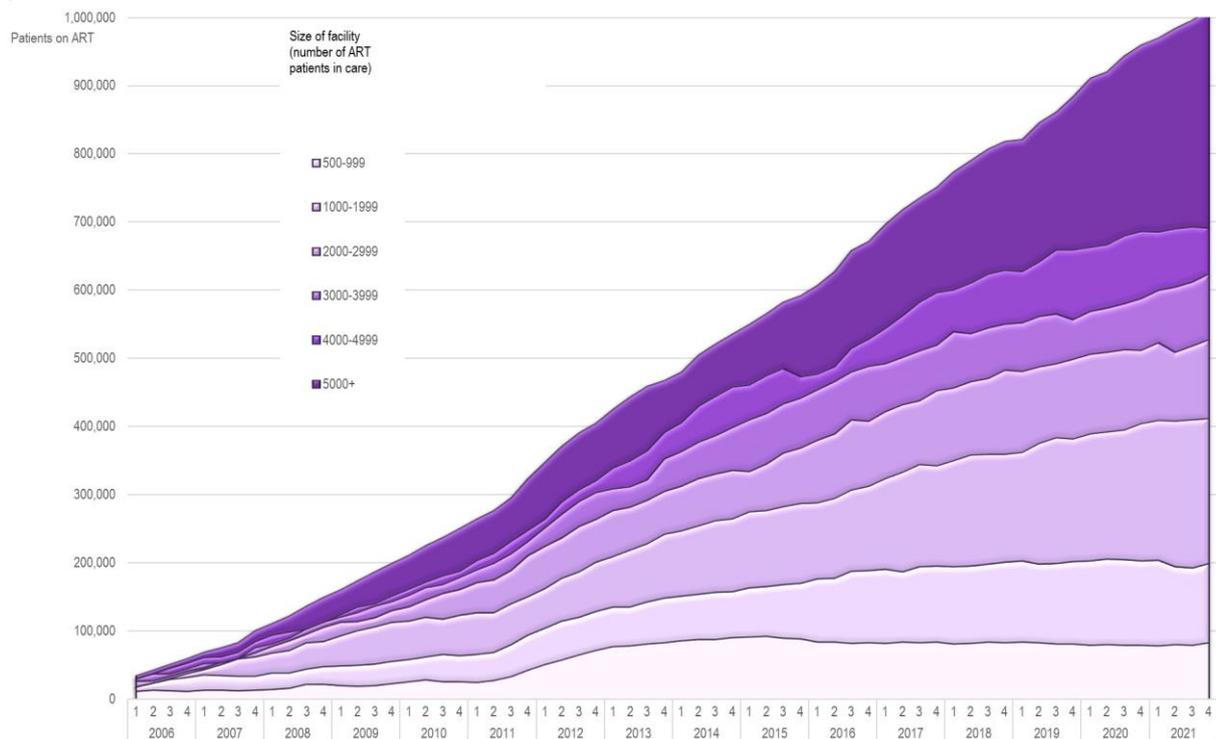


Figure 11 Figure 11 shows the decentralization of Malawi’s ART program that followed the opening of over 300 new ART sites with the introduction of Option B+ in Q3 2011. During 2012 and 2013, the greatest increase in ART patient numbers was seen at sites with fewer than 500 patients alive on ART. However, patient numbers at the high and ultra-high burden sites have continued to increase considerably in the more recent quarters. By the end of December

2021, **44%** of the national ART patient cohort was in care at sites with fewer than 2,000 patients.

Error! Reference source not found. shows the considerable decrease of ART drop-out rates since the start of the national program, most of which was contributed by reduction in mortality. Quarterly defaulter rates appeared to have stabilized around 1.8% over the last 5 years, but the calculated attrition rates have fluctuated considerably since 2019. These changes are mainly explained by active tracing efforts organized by implementing partners that have resulted in many patients who were previously reported as LTFU being re-classified as “transferred out” or “died”. Previous active tracing efforts were usually unable to track down patients who were lost more than a few months ago and it is difficult to confirm the validity of this recent large-scale reclassification of follow-up outcomes at the program level.

However, this quarter there has been an increase in the calculated defaulter rate (1.0%) from -0.43% in 2021 Q2. Loss to follow-up (‘defaulters’) include undocumented ‘silent’ transfers, undocumented mortality and patients actually stopping treatment. Efforts to harmonize strategies for patient retention are currently ongoing, including national standard operating procedures (SOPs) and tools for linkage and retention aiming to better track patients who miss appointment and document outcomes.

At national level, there were **2,375** net new deaths, **9,637** net new lost to follow-up and **214** net new confirmed stops in Q4 2021. This translates into a quarterly death rate of **0.26%** and a defaulter rate of **1.0 %** among the patients alive and on treatment in this quarter.

11.4 ART Cohort Survival Analysis

A 12 month ‘**cohort outcome survival analyses**’ was conducted for patients registered in Q3 of 2020, respectively. A separate 12-month cohort outcome analysis was conducted for children who were under 15 years at the time of ART initiation and who registered for ART in Q3 2020. A further subgroup analysis was done for women who started ART while pregnant or breastfeeding (Option B+).

80% of adults and **81% of children** were retained alive on ART after 12 months on treatment. 12-month retention rates were higher for adults (78%) and same for children (81%) in the previous quarter. These programmatic monitoring results remain below the WHO target of 85%, but actual retention rates are thought to be about **10%** higher due to this misclassification of ‘silent transfers’ as ‘defaulters’ in clinic-based survival/retention analysis. A population-based study in Karonga district with individual linkage showed that **92%** of patients started in 2011-2012 were retained after 12 months on ART while routine monitoring data showed **79%** retention rates for the same period.²²

6-month group cohort survival outcomes were known for **3,558** women registered as having started ART under Option B+ in Q2 2021. This is 19 more than the number of women registered under Option B+ in the quarterly cohort analysis in Q4 2021. This discrepancy is

²² Koole, O., Houben, R. M. G. J., Mzembe, T., Van Boeckel, T. P., Kayange, M., Jahn, A., Crampin, A. C. (2014). Improved retention of patients starting antiretroviral treatment in Karonga District, northern Malawi, 2005-2012. *Journal of Acquired Immune Deficiency Syndromes* (2014), 67(1), e27–33. doi:10.1097/QAI.0000000000000252

likely due to errors in data abstraction.²³ The 3,558 women in this cohort survival analysis include 488 (14%) women who transferred between sites. These transfers are double counted and discounted from the denominator (3,070) from the calculation of retention rates.

2,627 (86%) women in this cohort were retained at 6 months after registration. Of those not retained, **395 (89%)** were lost to follow-up, **34 (8%)** were known to have stopped ART and **14 (3%)** were known to have died.

12-month group cohort survival outcomes were known for **4,661** women registered as having started ART under Option B+ in Q4 2021. This is 22 higher than the number of women registered under Option B+ in the quarterly cohort analysis in Q4 2020. This discrepancy is likely due to errors in data abstraction.²⁴ The **4,661** women in this cohort survival analysis include 841 (18%) women who transferred between sites. These transfers are double counted and discounted from the denominator (**3,820**) for the calculation of retention rates.

3,134 (82%) of women in this cohort were retained at 12 months after registration. **620 (90%)** of those not retained were lost to follow-up, **46 (7%)** were known to have stopped ART and **20 (4%)** were known to have died.

6 month survival OptionB+

Survival and retention in ART program

*

ART cohort registration group outcomes

Total ART clinic registrations	3,558	100%
Transfers out (double counted)	488	14%
Total not transferred out (patients in cohort)	3,070	86%
Total alive on ART	2,627	86%
Total not retained	443	14%
Defaulted	395	89%
Stopped ART	34	8%
Died	14	3%

12 month survival OptionB+

Survival and retention in ART program

*

ART cohort registration group outcomes

Total ART clinic registrations	4,661	100%
Transfers out (double counted)	841	18%
Total not transferred out (patients in cohort)	3,820	82%
Total alive on ART	3,134	82%
Total not retained	686	18%
Defaulted	620	90%
Stopped ART	46	7%
Died	20	3%

²³ Group cohort survival analyses were not available from some sites with electronic data systems. 'Reason for starting' may be reclassified for some patients, leading to minor inconsistencies in patients included in group cohort survival analyses.

²⁴ Group cohort survival analyses were not available from some sites with electronic data systems. 'Reason for starting' may be reclassified for some patients, leading to minor inconsistencies in patients included in group cohort survival analyses.

11.5 Secondary outcomes of patients retained on ART

898,132 patients who were alive on ART and remained registered at their facilities have documented secondary outcomes.

ART Regimens

893,136 (99%) of patients were on NNRTI- or INSTI-based regimens. Due to the ongoing routine transition of patients from PI-based to DTG-based second line, the number of patients on PI-based 2nd line ART decreased by **1,228** from 3,628 in the previous quarter to **2,400 (<1%)** by the end of Q4 2021. **421 (<1%)** patients 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 NNRTI- or INSTI-based regimens, **16,528 (2%)** were on paediatric formulations. Most of these had transitioned from the previous standard first line for children; only **99 (1%)** remained on regimen 2P: AZT/3TC/NVP. A total of **8,601 (52%)** were on regimen 15PP: ABC/3TC+DTG. **853,785 (97%)** patients on adult formulations patients on 1st line ART were on the new standard first/second line regimen **13A (tenofovir / lamivudine /dolutegravir)** and only **1,571(<1%)** remained on regimen **5A** (tenofovir / lamivudine / efavirenz).

Adherence to ART

Completeness of adherence reporting has remained very high: **878,577 (98%)** of all patients retained in care had the number of missed doses documented at the most recent visit before end of the quarter evaluated. The classification of adherence levels is based on a combination of physical pill counts and self-reported number of doses missed in the last dispensing interval. **640,613 (73%)** of patients with documented adherence were classified as >95% adherent. The implausibly low proportion with good adherence is inconsistent with the high viral suppression rates in the overall cohort. The classification of 95% adherence based on pill counts has been affected by the long dispensing intervals that are now given to most patients. Therefore, manual and EMR-based classification of dose-adherence may be less reliable.

ART Side Effects

880,585 (98%) patients on ART had information on drug side effects documented at their last clinic visit before end of December 2021. **2,179 (<1%)** of patients with information had documented side-effects. The prevalence of side effects had stabilized at low levels following the full transition to regimen 5A (tenofovir / lamivudine / efavirenz) that started in July 2013 and has declined further following the transition to DTG-based regimens.

11.5.1 Viral Load (VL) Monitoring

Routine VL monitoring for patients on ART was introduced in 2012 and the number of patients receiving VL testing has increased considerably over the last few quarters. The programme revised the routine VL monitoring schedules from bi-annual to annual and this means the schedules are at 6 months and 12 months after ART initiation and every year thereafter.

11.5.2 Facility data from VL Sample Logbooks and High VL Registers

Facility VL registers were designed to facilitate tracking of samples and results and to improve appropriate follow-up action on high VL results.

193,446 VL samples were drawn in the reporting period and documented in the facility sample logbook. **172,431 (89%)** of these were for routine/scheduled VL monitoring; **16,800 (9%)** were extra-schedular and **4,215 (2%)** were replacements of lost samples. **15%** of the extra-schedular samples were targeted (suspected treatment failure) and **85%** were follow-up samples after an initial high VL.

Routine reporting of VL results and patient management outcomes is based on a cohort analysis of samples registered 6 months before the reporting period, assuming that all results and follow-up outcomes are complete after this period.

Final Results from Sample Logbooks

166,998 samples were drawn by facilities between April and June 2021 and outcomes were documented for **all** of these samples. **50,029 (30%)** results were received at the facility within 4 weeks of sample collection; **37%** were received between 5-8 weeks and **15%** between 9-12 weeks. The remaining **18%** were received after 12 weeks or were still missing. **12%** of patients were notified of their result within 4 weeks of sample collection, **16%** were notified within 5-8 weeks and **21%** within 9-12 weeks. **85,415 (51%)** of 166,998 were either notified after 12 weeks or the notification was still pending. **87%** of the results were printed in the lab and delivered at the facility and **13%** were electronically transmitted (including point-of-care device results).

146,084 (87%) of samples produced valid VL test results. **1,587 (1%)** samples were rejected, or the results were invalid and **19,327 (12%)** of samples had outstanding or missing results. **134,432 (92%)** results were suppressed below 1000 copies/ml and **11,652 (8%)** were high (≥ 1000 copies/ml).

Outcomes from High VL Registers

Between October and December, **10,612** high VL results (≥ 1000 copies/ml) were received at facilities and entered in the High VL Registers. **9,019 (85%)** of these were from routine monitoring samples, **1,317 (12%)** from targeted samples and **276 (3%)** from repeat samples. **8,148 (77%)** patients had completed intensive adherence support by December 2021 and follow-up samples were drawn for **6,124 (58%)**. Valid results were recorded for **4,723 (77%)** of follow-up samples and **68%** of these were re-suppressed (< 1000 copies/ml).

A final treatment decision was available for **4,895** high VL patients. **4,423 (90%)** were maintained on the current regimen, **411 (8%)** were switched to second line and **61 (1%)** were referred to HIV specialist.

The overall patient-level impact of the VL monitoring program remained sub-optimal this quarter. The HIV program is planning targeted interventions to reduce turn-around times and to improve health worker capacity for appropriate patient management based on VL results. However, following the mass-transition to DTG-based regimens, there are also

implementation challenges with the policy of obtaining a genotype resistance test for all patients with a non-suppressed follow-up VL results on DTG- and PI-based regimens.

11.5.3 VL Data from the Laboratory Information Management System (LIMS)

The number of VL results produced decreased from 137,039 in 2021 Q2 to **134,170 in Q3 2021**. Malawi now has a total of **13** PCR platforms in **10** molecular labs. All labs used the MOH lab information management system (LIMS) for registration of samples and storage of results. The Diagnostics Department is also piloting the use of point-of-care (POC) VL machines at 10 facilities and the validation results are currently being analysed. The POC data are not included in this report. The following results are based on an analysis of exported LIMS data.

134,170 VL results were dispatched from the labs to **646 sites** between July and September 2021. **67 sites** accounted for half of all results released this quarter.

21,411 (16%) of 134,170 samples processed were plasma and **112,759 (84%)** were DBS.

Lab	Samples Processed			Turn-around Time (Days) [§]
	Plasma	DBS	Total	
DREAM Blantyre	1043	8,111	9,154	50
DREAM Balaka	274	15,006	15,280	24
Kamuzu CH	5177	11,766	16,943	82
Mzimba DH	0	4,569	4,569	24
Mzuzu CH	0	10,960	10,960	36
Nsanje DH	0	7,479	7,479	35
Partners in Hope	3040	1,058	4,098	13
QECH	3532	10,153	13,685	93
Thyolo DH	0	6,290	6,290	124
Zomba CH	4669	21,511	26,180	23
Total	17735	96,903	114,638	35

§ Median days between sample collection and printing of results in lab

Partners in Hope, Zomba CH, Kamuzu CH and DREAM Blantyre produced 58 % of all VL results. The median interval between sample collection and printing of results was **35 days** at the national level, ranging from **13 days** at Partners in Hope to **124 days** at Thyolo DH. The most significant delays occurred between sample receipt and process run in the lab (median 22 days), while on average only 6 days elapsed between samples draw and sample receipt in the lab. The overall system capacity remains challenged by the high number of samples and competing priorities as the same labs are also handling the Covid-19 samples.

94,558 (82%) of VL results released this quarter were classified as *routine scheduled*²⁵. This is **42%** of the estimated 224,533 ART patients passing a VL monitoring milestone this quarter. **18,262 (16%)** of samples were classified as *targeted (suspected treatment failure / repeat)* and for **1,818 (2%)** the reason for the sample was 'other' or not specified. **93% (87,938)** of patients with a routine viral load result this quarter achieved viral suppression <1,000 copies/ml. This mean the target for the "3rd 95" was slightly missed.

²⁵ In addition to the reason specified on the lab form, samples were re-classified as 'follow-up' if another sample from the same patient was analysed within 1 year before the current one.

Viral suppression rates were significantly lower for routine samples among children (0-9 yrs: **73%**) and adolescents (10-19 yrs: **81%**) compared with adults in the age groups 20-29, 30-39, 40+ years who had viral suppression rates of **92%**, **94%** and **95%**, respectively. 93% of routine VL samples were from adults 20+ years. Patient age was not recorded for 2,864 (2%) of routine samples.

Reason	Suppressed		Low-Level Viraemia		Viraemia 1000+		Total
Routine	79,666	84%	8,798	9%	6,866	8%	94,588
Targeted	13,254	72%	2,539	14%	2,548	14%	18,341
Other/unk	1,242	71%	273	16%	224	13%	1,739
Total	194,162	82%	11,610	10%	8,866	8%	114,638

11,610 (10%) VL results were classified as low level viraemia (200-999 copies/ml for plasma samples: <839 copies/ml or 840-999 copies/ml for plasma samples). Based on the 2019 national HIV guidelines addendum²⁶ these results are interpreted as potential treatment failure and therefore in need for enhanced adherence support and a repeat VL sample collection after 3 months. **2,548 (14%) of 18,341** of targeted VL results were ≥ 1000 which is indicative of treatment failure and a potential indication for switching to 2nd line regimens.

The **18,341** targeted VL results this quarter are less than the 7,251 routine VL results ≥ 1000 copies/ml from the previous quarter and this can be attributed to the inclusion of patients with low-level viraemia. Patients with an initial routine VL result ≥ 1000 copies/ml are supposed to receive a follow-up VL test after 3 months of intensive adherence support (upon confirmation of good adherence). However, only 2,133 samples were marked as *confirmatory (follow-up)* and 1,324 as *targeted (treatment failure suspected)* on the lab request form. 6,163 were marked as 'routine' and retrospectively classified as *follow-up* due to a previous result collected from the same patient within 1 year before the current sample. This suggests challenges with the classification of reasons for testing, delayed follow-up and/or low utilization of VL results for patient management.

A large proportion of patients with an initial high VL are likely to re-suppress after intensified adherence counselling and the confirmation of treatment failure usually depends on a second VL result of ≥ 1000 after 3 months. There was a net decrease of 7,225 patients on protease inhibitor-based (PI) 2nd line ART²⁷ this quarter due to the ongoing routine transition of patients from PI-based to DTG-based 2nd line regimens. Regimen lines are no longer distinguishable as PI and INSTI are both used in 1st and 2nd line ART.

The time on ART was entered for **71,080 (75%)** of 94,558 routine samples registered on the LIMS and only **27,054 (38%)** of these were drawn on schedule (from 1 month before to 3 months after a VL milestone). The proportion of patients with VL <1000 was **90%**, **88%**, **93%**, **94%** and **94%** at 6, 24, 72, 96 and 120 months on ART respectively. Viral suppression rates of samples drawn on schedule were similar to of 'catch-up' (extra-schedular) samples and samples with unknown timing both at 94%.

²⁶ Addendum to the 4th Edition of the Malawi Integrated Guidelines and SOPS for Clinical HIV services

²⁷ Regimen 13A (tenofovir / lamivudine /dolutegravir) is being used as both 1st line and 2nd line regimen. Therefore, the classification of first- and second-line patients is no longer clear.

11.6 TB / HIV Management

3,772 (99%) of **3,817** new TB patients had their HIV status ascertained this quarter and **1,610 (44%)** of these were HIV positive. **1,557 (93%)** of HIV positives were already on ART at the time of TB treatment initiation. The number of new ART initiations during TB treatment is tracked by the National TB control program. Total ART coverage among co-infected patients at the end of TB treatment has consistently been >95%.

12 STI Treatment

This quarter, supervision teams collected STI data from 735 out of 962 facilities offering STI management according to the *2018-19 Malawi Harmonized Health Facility Assessment (HHFA)*²⁸ in Malawi. The site-level reports included here may therefore only represent 75% of all STI services in Malawi. Supervision teams re-emphasized the importance of complete and accurate documentation at the sites and the data quality is expected to improve further with resumption of regular site supervision for the STI program. The complete set of STI program data collected is included in the Appendix.

12.1 Access to STI treatment and coverage

Based on the data collected at the facilities, a total of 108,873 STI cases were treated in Q4 2021. Considering the 75% site-level completeness of reporting, this number is estimated to represent a total of **145,164** STI cases treated. This is equivalent to **52%** of the estimated quarterly 281,075 STI cases in the population (extrapolation from 2015/16 MDHS)²⁹.

Out of 108,873 documented clients treated, **44,523 (41%)** were male and of the males 30,052 were non-circumcised. 64,350 (**59%**) were female. 9,032 (**14%**) of female STI clients were pregnant. 14,471 were circumcised (**33%**) of male STI clients were circumcised. 73,045 (**67%**) clients were 25 years and above, **26,151 (24%)** were 20-24 years and 9,677 (**9%**) were under 20 years old.

12.2 Client Type and STI History

97,444 (90%) of clients were symptomatic and **11,429 (10%)** were asymptomatic (treated as partners). Among symptomatic clients, **89,490 (92%)** were index cases and **7,954 (8%)** were partners. A total of **23,774** partner notification slips were issued, equivalent to an average of **0.27** slips per index case. Considering the **23,774** partner notification slips issued, **82% (19,383)** of those notified presented to the clinic. **80,584 (74%)** of clients presented with their first lifetime episode of STI; **21,402 (76%)** clients out of 28,289 with previously treated STIs were reported to have had an STI more than 3 months ago and **6,887 (24%)** 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.

²⁸ Ministry of Health (2019). Malawi Harmonized Health Facility Assessment 2018-20 Preliminary Report

²⁹ According to the 2015/16 MDHS, 14.7% of women (15-49 years) and 9.6% of men (15-49 years) reported STI symptoms in the past 12 months. A total of 1,124,303 annual STI cases are estimated by applying these proportions to the 4.3 million men and 4.8 million women in these age groups in the 2018 population (NSO projections) for 2021. Quarterly STI cases are assumed as ¼ of the estimated annual cases in the population.

12.3 HIV Status

HIV status was ascertained for 96,848 (89%) clients and 1,565 (19%) of these were HIV positive. 2,200 (12%) of positives were identified through a new test initiated at the STI clinic, while 16,365 (88%) presented with a documented previous positive HIV test result. 15,840 (97%) of clients with a previous positive HIV test result were on ART.

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. 45,214 (58%) of the 78,283 STI clients with unknown or new negative test result were referred for repeat HTS. 5,285 patients were reported as “referred for ART”. This exceeds the sum of new positives (2,200) and previous positives not on ART (525) and is likely explained by wrong documentation of ART referrals for patients already on ART.

The rate of HIV status ascertainment at STI clinics has improved considerably over time and high rates have been maintained throughout the COVID-19 period. This is due to increased numbers of dedicated testing staff available at the sites (HDAs). Actual HIV ascertainment rates may be even slightly higher due to weaknesses with back-referral from HIV testing rooms at sites where testing is not provided directly in the STI clinic. 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 in small part due to the increased risk of recurrence of HSV-2 and balanitis among HIV-infected clients.

12.4 STI Syndromes and Referrals

The most common syndrome was abnormal vaginal discharge (AVD) with 36,118 (31%) cases, followed by ureteral discharge (UD, 31,758) cases, genital ulcers (GUD, 13,139 cases) and lower abdominal pain (LAP: 14,695 cases). Serologically confirmed syphilis accounted for 8% of the cases. Scrotal swelling, bubo and genital warts each accounted for 1% of cases.

13 Supply Chain Management of HIV Program Commodities

Forecasting, Quantification and Procurement Planning

To ensure uninterrupted supply of HIV commodities, PSM with support from M&E and Care & Treatment section conducted the annual forecasting and quantification for HIV testing kits, ARVs, Diagnostic reagents and consumables and cotrimoxazole preventive therapy using service data, consumption and physical inventory/stock data obtained during the joint Q3 HIV/TB quarterly supervision visit. The Quantification took into consideration pipeline stock data from the Procurement Services Agents (PSA); in-country stocks available at the central warehouse; and the average monthly consumption (AMC) to determine the months of stock (MOS) on hand as a guide to the duration the total available stock would last the program and forecast the future needs based on current usage and issuance trends. The final quantification outputs were costed and shared with the Global Fund for approval and subsequently, commodity orders for 2022 were initiated through the Global Fund online ordering system (wambo online).

The total value of procurements initiated in the period under the Global fund's pooled procurement mechanism (PPM) in various program categories are:- ARVs worth \$49,466,800.9 VL/EID reagents worth \$8,352,241.69, haematology/chemistry reagents worth \$972,068.41, blood safety worth \$371,276.66, rapid testing kits worth \$ 745,570.72 and OI/STIs medicines including cotrimoxazole worth \$10,170,303.64. Additionally, the Department for HIV,AIDS and Viral hepatitis received ARVs, OI/STI medicines, rapid testing kits, VMMC kits and Male condoms worth \$8,344,912.64 from October to December 2021 through PEPFAR, I-PLUS Solutions, PFSCM and UNFPA. (PEPFAR - \$2,352,785.71, i-Plus Solutions- \$ 2,388,097.03 PFSCM- \$ 3,155,754.50 and UNFPA- \$ 448,275.40).

13.1 Quarterly supply chain support during 2021 Q4 activities

During the Q4 2021 integrated ART/TB quarterly supervision, pharmacy personnel including pharmacists, pharmacy technicians, supply chain & logistics officers from district and central level conducted supervision and mentorship to pharmacy personnel at 786 health facilities in inventory management – completion of transaction records for commodities movement from drugs stores including stock cards, issue/requisition vouchers; documentation management for warehouse receipts, interfacility relocations, consumption, damages, expiries and obsolete commodities; proper drug stores management (clean & organised products, well ventilated, monitoring temperatures/humidity, storage on shelves and pallets, with no pest/rodent infestations in the stores); stock management

Physical inventory counting was conducted at all sites and on the job mentoring of pharmacy personnel in stock management especially those with poor performance. There was overall improvement in site-level stock management for HIV commodities.

Table 7. shows the total in-country stocks for various commodities at the health facilities and in the central warehouse, months of stock on hand and the average monthly consumption rates.

13.2 Availability of standard first line ARVs

Adequate stock levels of TLD in packs of 30 and 90 tablets were maintained at over 786 health facilities sites during this period, a total of 524,388 packs of 30's and 562,956 packs of 90's were allocated for distribution round 64. This enabled sites to support patients eligible for 6-month dispensation with no stock out risk in country.

13.3 Bimonthly distribution of HIV Commodities

Distribution of commodities to over 780 facilities was done in October and December as scheduled. Distribution round for ARVs, test kits, OI/STI medicines and other HIV related commodities (distribution rounds 63 in October and 64 in December 2021).

Additionally, the PSM team coordinated 3,810 individual commodity transactions between ART sites to mitigate stock imbalances (49% ARVs; 26% Test kits; 25% Others). All transactions were managed and authorized using the HIV Department Supply Chain Hot Line, a toll-free facility that was set up to facilitate communication between the health facilities and the central level. Health workers can communicate supply chain and other HIV commodities related issues that need to be resolved by the technical team at the department in a timely

manner and at the same time, virtual mentorship is offered to health care workers on supply chain related matters.

Table 7

Total stocks of HIV program commodities at all sites visited during the 2021 Q4 supportive site supervision. Stock positions are from the date of the visit (between 1-4 weeks after the end of the quarter). Warehouse stock positions are from 01/02/2022

Inventory unit	Item	Sites with any Stock	Total Physical Stock		Consumption/ Month	Months of Stock *	
			At Sites	In Warehouse		At Sites	Wareh.
tins	ABC / 3TC 120 / 60mg tins (30 tabs)	598	90,632	929,247	50,980	1.8	18.2
	ABC / 3TC 600 / 300mg tins (30 tabs)	642	37,036	32,146	12,810	2.9	2.5
	ATV / r 300 / 100mg tins (30 tabs)	575	51,275	59,003	2,066	24.8	28.6
	AZT / 3TC / NVP 300 / 150 / 200mg tins (60 tabs)	420	106,852		108	989.4	
	AZT / 3TC / NVP 60 / 30 / 50mg tins (60 tabs)	571	204,331	4,881	248	825.6	19.7
	AZT / 3TC 300 / 150mg tins (60 tabs)	734	72,516	50,842	10,223	7.1	5.0
	AZT / 3TC 60 / 30mg tins (60 tabs)	175	11,821	28,533	5,324	2.2	5.4
	DRV 150mg tins (240 tabs)	7	34	64	0	0.0	0.0
	DRV 600mg tins (60 tabs)	45	1,136	2,584	109	10.4	23.7
	DRV 75mg tins (480 tabs)	7	37	37	0	0.0	0.0
	DTG 10mg tins (90 tabs)	537	13,681	14,842	8,938	1.5	1.7
	DTG 50mg tins (30 tabs)	592	37,581	56,011	28,938	1.3	1.9
	EFV 200mg tins (90 tabs)	164	2,079	594	7	283.5	81.0
	EFV 600mg tins (30 tabs)	10	917	2,028	28	32.8	72.4
	LPV / r 100 / 25mg tins (60 tabs)	623	62,525	17,090	3,916	16.0	4.4
	LPV / r 200 / 50mg tins (120 tabs)	702	15,263	13,049	252	60.6	51.8
	LPV / r 40 / 10mg tins (120 granules)	493	60,998	9,234	538	113.5	17.2
	NVP 200mg tins (60 tabs)	398	27,745		103	269.4	
	r 100mg tins (60 tabs)	17	320		273	1.2	
	r 25mg tins (30 tabs)	5	167		217	0.8	
	RAL 100mg tins (60 tabs)	4	108	193	15	7.2	12.9
	RAL 25mg tins (60 tabs)	30	691	678	0	0.0	0.0
	RAL 400mg tins (60 tabs)	7	308		0	0.0	0.0
	TDF / 3TC / DTG 300 / 300 / 50mg tins (30 tabs)	755	471,214	1,003,700	170,709	2.8	5.9
	TDF / 3TC / DTG 300 / 300 / 50mg tins (90 tabs)	749	346,595	325,675	227,607	1.5	1.4
	TDF / 3TC / EFV 300 / 300 / 600mg tins (30 tabs)	19	879		1,570	0.6	
	TDF / 3TC / EFV 300/300/400mg tins (30 tabs)	240	9,289	388,898	1,570	5.9	247.7
TDF / 3TC 300 / 300mg tins (30 tabs)	480	54,774	41,830	8,962	6.1	4.7	
bottles	Fluconazole (generic) 50mg / 5ml bottles (35 ml)	10	737	800			
	NVP 50mg/5ml bottles (100 ml)	612	30,461	123,602	5,485	5.6	22.5
vials	Amphotericin B Liposomal 50mg vials (10 each)	47	4,790	3,430	0	0.0	0.0
	Benzathine Penicillin 144g vials (50 each)	588	86,668	298,400	14,139	6.1	21.1
	Bleomycine 15,000IU vials (1 each)	40	628,005	31,561	37	#####	857.6
	Ceftriaxone 1g vials (10 each)	332	292,225		168,560	1.7	
	Depo-Provera 150mg/1ml vials (25 each)	544	946,797		269,068	3.5	
	Fluconazole (Diflucan) 2mg / 1 ml vials (10 ml)	23	19,560	1,921	0	0.0	0.0
	Gentamicin 80mg / 2ml vials (50 each)	297	125,171		158,622	0.8	
	Paclitaxel 6mg/ml vials (1 each)	27	1,392	2,478	0	0.0	0.0
	Streptomycin 1 g vials (50 each)	3	195				
	Vincristine 1mg / 1ml vials (1 each)	37	10,544	9,591	221	47.8	43.4
	tabs	Aciclovir 200mg blister packs (500 tabs)	21	46,240		1,016,073	0.0
Aciclovir 200mg tins (100 tabs)		693	1,464,944	10,415,200	304,536	4.8	34.2
Azithromycin 500mg blister packs (3 tabs)		530	142,183	56,892	4,465	31.8	12.7
Ciprofloxacin 500mg blister packs (100 tabs)		365	249,431	1,384,300	65,529	3.8	21.1
Clotrimazole 500mg boxes (1 each)		611	57,075	82,589	11,475	5.0	7.2
Codeine 30mg tins (100 tabs)		28	1,595,341				
Cotrimoxazole 100 / 20mg blister packs (1000 tabs)		698	42,458,192	213,446,000	6,559,890	6.5	32.5
Cotrimoxazole 400 / 80mg tins (1000 tabs)		141	1,541,380		26,646,352	0.1	

Inventory unit	Item	Sites with any Stock	Total Physical Stock		Consumption/ Month	Months of Stock *	
			At Sites	In Warehouse		At Sites	Wareh.
	Cotrimoxazole 960mg blist packs (1000 tabs)	622	10,707,439	48,279,000	26,398,083	0.4	1.8
	Doxycycline 100mg blist packs (500 tabs)	35	287,496		10,233,794	0.0	
	Doxycycline 100mg tins (1000 tabs)	591	3,582,301	1,042,000	7,523,593	0.5	0.1
	E thambutol (E) 100 mg blist packs (100 tabs)	187	173,368				
	E thambutol (E) 400 mg blist packs (672 tabs)	26	28,301				
	Erythromycin 250mg tins (100 tabs)	415	347,938	338,100	202,064	1.7	1.7
	Erythromycin 250mg tins (1000 tabs)	38	90,358		6,285,258	0.0	
	Fluconazole (Diflucan) 200mg blist packs (100 ca)	126	378,178	1,198,800	0	0.0	0.0
	Fluconazole (Diflucan) 200mg tins (28 tabs)	49	67,819		0	0.0	0.0
	Flucytosine 500mg blist packs (100 tabs)	44	41,476	9,400			
	Ibuprofen 200mg tins (100 tabs)	184	3,424,700		1,362,071	2.5	
	Isoniazid (H) 100mg blist packs (100 tabs)	266	310,924	0			
	Isoniazid (H) 300mg blist packs (672 tabs)	702	13,039,679	28,321,440	961,499	13.6	29.5
	Isoniazid (H) 300mg tins (1000 tabs)	23	53,649		26,398,083	0.0	
	Isoniazid / Rifapentine 300 / 300mg blist packs (3)	612	900,831	2,941,272	221,570	4.1	13.3
	Metronidazole 200mg tins (1000 tabs)	592	10,055,069	7,224,000	0	0.0	0.0
	Morphine 10mg blist packs (60 tabs)	28	217,414		347,105	0.6	
	Morphine 30mg blist packs (30 tabs)	13	11,801		0	0.0	0.0
	Pyridoxine 25mg tins (100 tabs)	720	14,810,402	51,114,200	961,499	15.4	53.2
	RH 150 / 75 mg blist packs (672 tabs)	392	1,724,170				
	RH 75/50mg blist packs (84 tabs)	159	220,604				
	RHZ 75/50/150mg blist packs (84 tabs)	160	148,074				
	RHZE 150/75/400/275mg blist packs (672 tabs)	397	1,161,873				
	Rifapentine 150mg tins (24 tabs)	665	1,519,086	594,168	556,850	2.7	1.1
sheets	ART pat. card adult (yellow) Ver8 bundles (50 she	690	386,195	219,700	60,192	6.4	3.6
	ART pat. card paed. (blue) Ver 8 bundles (50 she	628	58,013	80,000	4,020	14.4	19.9
	Exposed child card (pink) Ver2 bundles (50 sheet	627	67,482	43,200	4,211	16.0	10.3
	Polythene sleeve bundles (100 sheets)	467	167,050		14,911	11.2	
books	Family HTC Referral Slip bundles (100 sheets)	609	309,053				
	STI Partner Referral Slip bundles (100 sheets)	98	39,827	799,750			
tests	Cryptococcal antigen CrAg bundles (50 each)	122	12,966	23,550	0	0.0	0.0
	DBS kit (filter paper, lancet, etc.) 70ul boxes (50 t	281	54,412	125,800	251,546	0.2	0.5
	Determine HIV1/2 boxes (100 each)	683	489,661	2,330,300	225,340	2.2	10.3
	Determine TB LAM Ag bundles (100 each)	14	1,300				
	Hepatitis B HBsAg rapid test SD Bioline boxes (3	110	60,113	672,270	3,836	15.7	175.2
	OraQuick HIV Self-test bundles (25 each)	596	538,991	655,175	128,924	4.2	5.1
	SD Bioline Syphilis boxes (30 each)	597	85,698	394,770	51,549	1.7	7.7
	Uni-Gold HIV1/2 boxes (20 each)	670	53,646	128,740	18,139	3.0	7.1
pieces	Condoms female boxes (1000 each)	413	438,361	3,000	298,279	1.5	0.0
	Condoms male boxes (144 each)	715	36,443,135	80,222,832	6,234,760	5.8	12.9

* 'Consumption per month' and 'Months of stock' for ARVs, CPT, INH and HIV test kits are based on the respective patient-regimen groups in the standard service reports. Estimates are based on the number of patients on the respective regimen at the end of the quarter evaluated and do not account for potential (positive or negative) growth. Facility stock positions for OI and STI drugs include HIV Program and other supply sources. Total national consumption and MoS estimates are used for these commodity groups. 'Months of stock' is calculated from the day of the physical stock count, which is on average 1 month after the end of the quarter.

14 Participants in the Q4 2021 Supervision (17-28 January 2022)

Yaseen Abdullah (, Moh)	Thom Chirwa (, MOH)	Mercy Kamwera (, MOH)
Richard Abudul (CO, MOH)	Thomson Chirwa (, moh)	Justice Kaphiri (, NTP)
Blessings Banda (MA, MOH)	Stella Chitawo (, MOH)	Elisa Kapundi (NMT, MOH)
Knox Banda (TB Zonal Supervisor, MOH)	Samson Chitsulo (, other)	Clive Kasalu (, Partners in Hope)
Veronica Banda (, moh)	Jeremiah Chiumia (, MoH)	Annie Kaseka (RNM, MOH)
Wells Banda (CO, MOH)	Mada Chiundira (, private)	Paul Kaseka (, MOH)
Robert Beston (, MOH)	Madalitso Chiundira (, MoH)	Mathews Kaselema (, Private)
Thomas Biseck (, MOH)	Dan Chiundu (, MOH)	Matias Kaselema (Nurse, MOH)
Thomas Bisek (, Balaka)	Merthwin Chiwaya (, MOH)	Benard Kasinja (CO, I-TECH)
Annie Biza (, moh)	Stuart Chuka (CO, MBCA)	Bernald Kasinja (, private)
Felix Botha (, MOH)	Pius Chulu (, MoH)	Joseph Kasola (CO, MOH, Chitipa DH)
Regina Bwanali (, MOH)	Mcdonald Domingo (, MOH)	Catherine Kassam (, MOH)
Davis Chabuka (CO, MOH)	Peter Donda (CO, Dedza DH)	Absalom Kaunda (CO, MOH, Mzimba DHO)
Faith Chabwera (, DIGNITAS)	Lucious Donsa (, MOH)	Kondwani Kautsa (, MOH)
Hope Chadwala (, MOH)	Mnyila Fainala (, moh)	Thokozani Kavamgomo (, MoH)
Herbert Chafulumira (, MOH)	Richard George (, MOH)	Raymond Kawowa (, MoH)
Demobry Chagomerana (, MoH)	Sidrick Golden (, MOH)	Hope Kumwenda (, MoH)
Paul Chakhala (, moh)	Benadetta Gondwe (, Lighthouse)	Wongani Kumwenda (, MOH)
Lincy Chalunda (CO, MOH)	Grant Gondwe (, NTP)	Charles Kwenje (, Moh)
Rachel Champiti (, MOH)	Mphatso Graciono (, MoH)	George Lipande (CO, MOH)
Manaqse Chapita (, moh)	Joe Gumulira (CO, MOH)	Eda Lipipa (Nurse, MOH)
Grace Chawinga (, MOH)	Lydia Gumulira (C.O, CHAM)	Jesse Lobeni (Nurse, MOH)
Ronard Chawinga (nurse, MOH)	Sidder Hambisa (ENM, MOH)	Wezzie Luhanga (, MOH)
Comfort Chayachaya (, MoH)	Miriam Hanjahanja (, cham)	Samuel Lunda (, MoH)
Chikaiko Chibwana (CO, MOH)	Natasha Harawa (, MoH)	Diana Lweshwa (, MoH)
Margaret Chigona (CO, Blantyre DHO)	Chikondi Harrison (, Logistics)	Emmanuel Magombo (, MOH)
Grace Chikhwaya (, MOH)	Elias Jambo (, moh)	Chikayiko Majamanda (Nurse, MOH)
Kondwani Chikoti (CO, MOH)	Mataya Jeke (, Zomba Central)	Ezra Majoni (Nurse, MOH)
Verydear Chilapondwa (, MOH)	Emmanuel Jumbe (CO, NGO)	Mercy Makaika (Nurse, MOH)
George Chimadzuma (, MoH)	Francis Kachali (, MoH)	Linda Makata (, MOH)
Spain Chimaliro (, moh)	Arlene Kachapira (, MoH)	Mwai Makina (, MOH)
Demster Chimatilo (, moh)	Layout Kachere (CO, Lighthouse)	Chifundo Makuluni (, MOH)
Dickens Chimatiro (, MOH)	Matthews Kadewa (, I-TECH)	Felix Mala (, MOH)
Peter Chimphero (CO, MOH)	Gift Kafera (, MoH)	Lusayo Malanga (, MoH)
Matthews Chimtenga (, Lighthouse)	Vera Kajawa (Nurse, MOH)	Grey Malata (, MOH)
Yunus Chiosa (, NTP)	Angelina Kalonga (Nurse, MOH)	Benard Malenga (, MOH)
Diana Chipande (, MOH)	Mac Williams Kalua (, MoH)	Thokozani Malimelo (, MoH)
Grace Chipanga (Nurse, Private)	Mike Kalulu (CO, MOH)	Emily Manda (Nurse, MOH)
Clement Chiphota (CO, MoH)	Richard Kamalizeni (, MOH)	Charles Mandambwe (, MoH)
Elvin Chipoya (, MOH)	Albert Kamanga (, MoH)	Cecilia Manyawa (Nurse, MOH)
Exvin Chipoya (, MoH)	Blessings Kamanga (Clerk, MOH)	Fanny Manyozo (, MOH)
Twaibu Chipwere (, PIH)	Alex Kambanga (, MoH)	Fatsireni Mapulanga (, MOH)
Esnart Chirambo (, MoH)	Mary Kamiza (TB Zonal Supervisor, NTP)	Angela Masamba (, moh)
Evans Chirambo (, MoH)	Emmanuel Kampaliro (, MOH)	Innocent Masula (, Lighthouse)
Ruth Chirombo (, MOH)	Gift Kamphika (MA, MOH)	Innocent Masuli (, Lighthouse)
Maggie Chirwa (, Lighthouse)	Pocha Kamudumuli (, UMB)	Angela Masumba (, moh)
Primo Chirwa (, MOH)	Thokozani Kamvamgomo (, MoH)	Jake Mataya (, moh)
Samuel Chirwa (, moh)	Jacqueline Kamwana (, Moh)	Jeke Mataya (, moh)
	Mercy Kamwela (, supervisor)	

Steven Matewere (, Chichiri Prison Clinic)
 Rose Maviko (Nurse, Limbe HC)
 Yanjanani Mawindo (, MoH)
 Felix Mbalale (CO, MOH)
 Loyd Mbaza (, other)
 Kingsley Mbewa (CO, MOH)
 Phalarious Mboga (, moh)
 Topcy Mdolo (, MOH)
 Eustice Mhango (ART officer, MOH, Department of HIV and AIDS)
 Henderson Mhone (, MOH)
 Christopher Misomali (Lab Tech, MOH)
 Alex Mission (, MOH)
 Portifer Mission (, moh)
 Joel Mkandawire (, MoH)
 Lordson Mkonjo (, moh)
 Chimwemwe Mlenga (, MOH)
 Christopher Mlotha (, MoH)
 Madalitso Mmanga (, MOH)
 Florence Mndala (Nurse, Partners)
 Shedrick Mndewere (, MOH)
 Yvonne Mnjeza (, MOH)
 Hananiah Moyo (, UMB)
 Happy Mpawa (, MOH)
 Noel Mphasa (TB Zonal Supervisor, NTP)
 Cecilia Mphika (, MOH)
 Henry Mphonde (CO, Lighthouse)
 Tryness Mponda (NMT, MOH)
 Damison Msiska (CO, Dwangwa)
 Malango Msukwa (, UMB)
 Voster Msutu (, MOH)
 Sosten Mtalika (, Dedza)
 Angella Mtambalika (, MOH)
 Egnatius Mtambalika (, DTO)
 Ignasious Mtambalika (, MOH)
 Rebecca Mtambo (, MoH)
 Temweka Mtenje (, MoH)
 Joshua Mtonga (, SHHC)
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 Davie Muhasiwa (, public)
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 Agnes Mulilima (, moh)
 Yamikani Mulore (, MOH)

Kim Mustafa (, moh)
 Fainala Muyila (Nurse, MOH)
 Hiva Mvehiwa (, private)
 Tereza Mvula (, MOH)
 Theresa Mvula (, MOH)
 Ruockia Mwachumu (Nurse, MOH Nsanje DHO)
 Virginia Mwafulirwa (, Partners in Hope)
 Gladys Mwale (Nurse, MOH)
 Thomas Mwale (, MOH)
 Harold Mwaleya (MA, MOH)
 David Mwalirino (, UMB)
 Innocent Mwaluka (, moh)
 Chikondi Mwambula (, Lighthouse)
 Mirriam Mwansambo (, MoH)
 Harold Mwareya (, MOH)
 Golden Mwathunga (MA, Press)
 Emmanuel Mwenkinda (, MoH)
 Anne Mwenye (, Private)
 Annie Mwinama (, MoH)
 Riff Mzava (Nurse, MOH)
 Mercy Mziya (, MoH)
 Peter Mzumara (ART clinician, MOH)
 Fred Namalima (MA, MOH)
 Austins Namondwe (CO, CHAM)
 Pepsy Nangwale (Nurse, MOH)
 Leonard Ndhlovu (Nurse, MOH)
 Overton Ndhlovu (, MOH)
 Youngson Ngonya (, MoH)
 Mary Ngulama (, MOH)
 Etta Ngulube (, MoH)
 Chisomo Ngwalo (, COM)
 Charles Ngwira (, MoH)
 Eunice Ngwira (, MOH)
 Angelina Nhlema (, Lighthouse)
 Beatrice Nindi (, MoH)
 Trevor Chifundo Nindi (, Balaka DHO)
 Tamanda Njenjenje (, MOH)
 Dumbo Njera (, MOH)
 Merium Nkangala (, moh)
 Franklin Nkhambule (, MOH)
 Grace Juma Nkhata (Nurse, MOH)

Angela Nkhoma (Nurse, MOH)
 Hannah Nkhoma (, MOH)
 Joe Nkhonjera (, moh)
 Vitu Nkhunga (, MOH)
 George Nsitu (, MOH)
 Judith Ntopa (Nurse, Cobbe Barracks)
 Jotham Nyasulu (, MOH)
 Steven Nyika (, MOH)
 Catherine Nyirenda (, Private)
 Feliya Nyirenda (, Machinga)
 Mabvuto Nyirenda (, MOH)
 Michael Nyirenda (, MOH)
 Eliana Nyondo (, MoH)
 Chrissy Padoko (, MOH)
 Lifton Palani (, MOH)
 Paul Petersen (, MoH)
 Paul Peterson (, MOH)
 Bright Phiri (, MOH)
 Kondwani Phiri (, MOH)
 Mackson Phiri (, PIH)
 Precious Phiri (, MoH)
 Tifera Phiri (, MOH)
 Macleod Piringu (ART COORDINATOR, MOH)
 Beston Robert (, MOH)
 Alice Sajeni (, moh)
 Gift Sambiri (CO, MOH)
 Dorica Sambo (Nurse, MOH)
 Geofly Sasani (, MOH)
 Kondwani Shaba (, MoH)
 Oscar Shaibu (, MoH)
 Golden Sidrick (, moh)
 Isaah Sikamba (, private)
 Isaiah Sikamba (, MOH)
 Penjani Singini (Pharmacist, MOH)
 Juliana Soko (ARV nurse, MOH, Livingstonia MH)
 Ethel Susuwele (MA, MOH)
 Mark Suzumire (CO, MOH)
 Bruce Tambwali (Nurse, NGO)
 Nyanyiwe Tembo (Nurse, MOH)
 Panganeni Tembo (, moh)
 Harry Tsapa (CO, MOH)
 Lloyd Wella (CO, MOH)
 Oscar Witman (, MOH)
 Shaibu Witman (, MOH)

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.

June 2022

15 Appendix (Full National HIV Program Data)

HTC site report

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Clients at health facility (static)

HTC client details

*

Total HTC clients served

Total HIV tested	639,376	100%
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Sex

Males tested	207,163	32%
Females tested	432,213	68%
Females non-pregnant	260,621	60%
Females pregnant	171,592	40%

Age

Children 0-14 yrs	47,377	7%
Children below 12 mths (Age group A)	1,001	2%
Children 12 mths - 14 yrs (Age group B)	46,376	98%
Adults 15+ years	591,999	93%
Young adults 15-24 years (Age group C)	274,048	46%
Older adults 25+ yrs (Age group D)	317,951	54%

HTC access type

PITC	516,018	81%
Family Referral Slip (FRS)	25,402	4%
Other (VCT, etc.) HTC access	97,956	15%

HTC first time / repeat

Never tested before	112,575	18%
Previously accessed HTC	526,801	82%
Last negative	505,555	96%
Last positive	20,736	4%
Last exposed infant	165	0%
Last inconclusive	345	0%

Counseling session type / Partner present

Counseled with partner / partner present	149,830	23%
Counseled alone / Partner not present	489,546	77%

Outcome summary (HIV test)

Single test negative	598,882	94%
Single test positive	55	0%
Test 1&2 negative	425	0%
Test 1&2 positive	38,802	6%
Test 1&2 discordant	1,212	0%

HTC site report

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

HTC client details

*

Final result given to client

Results among clients never tested / last negative	618,535	97%
New negative	599,259	97%
New positive	18,051	3%
New positive (non-sex dissag)	537	3%
New positive (dissag by sex)	17,514	97%
New positive male	7,281	42%
New positive female	10,233	58%
New inconclusive	1,171	0%
New exposed infants	54	0%
Confirmatory results (previous positive clients)	20,841	3%
Confirmatory positive	20,771	100%
Confirmatory positive (non-sex dissag)	628	3%
Confirmatory positive (dissag by sex)	20,143	97%
Confirmatory positive male	8,353	41%
Confirmatory positive female	11,790	59%
Confirmatory inconclusive	70	0%

Partner / Family HTC referral slips

Sum of slips given	25,728	100%
Total clients presenting with referral slip	25,402	99%
Total failed referrals (slips not returned)	326	1%

Clients tested in the community

HTC client details

*

Total HTC clients served

Total HIV tested	35,378	100%
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Sex

Males tested	14,064	40%
Females tested	21,314	60%
Females non-pregnant	17,147	80%
Females pregnant	4,167	20%

Age

Children 0-14 yrs	3,954	11%
Children below 12 mths (Age group A)	44	1%
Children 12 mths - 14 yrs (Age group B)	3,910	99%
Adults 15+ years	31,424	89%
Young adults 15-24 years (Age group C)	16,520	53%
Older adults 25+ yrs (Age group D)	14,904	47%

HTC access type

PITC	12,983	37%
Family Referral Slip (FRS)	4,220	12%
Other (VCT, etc.) HTC access	18,175	51%

HTC site report

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

HTC client details

*

HTC first time / repeat

Never tested before	9,902	28%
Previously accessed HTC	25,476	72%
Last negative	24,842	98%
Last positive	585	2%
Last exposed infant	24	0%
Last inconclusive	25	0%

Counseling session type / Partner present

Counseled with partner / partner present	2,305	7%
Counseled alone / Partner not present	33,073	93%

Outcome summary (HIV test)

Single test negative	33,520	95%
Single test positive	3	0%
Test 1&2 negative	15	0%
Test 1&2 positive	1,789	5%
Test 1&2 discordant	51	0%

Final result given to client

Results among clients never tested / last negative	34,777	98%
New negative	33,592	97%
New positive	1,155	3%
New positive (non-sex dissag)	69	6%
New positive (dissag by sex)	1,086	94%
New positive male	512	47%
New positive female	574	53%
New inconclusive	26	0%
New exposed infants	4	0%
Confirmatory results (previous positive clients)	601	2%
Confirmatory positive	599	100%
Confirmatory positive (non-sex dissag)	10	2%
Confirmatory positive (dissag by sex)	589	98%
Confirmatory positive male	274	47%
Confirmatory positive female	315	53%
Confirmatory inconclusive	2	0%

Partner / Family HTC referral slips

Sum of slips given	1,442	100%
Total clients presenting with referral slip	4,220	293%
Total failed referrals (slips not returned)	-2,778	-193%

Clients at stand-alone HTC sites

HTC client details

*

Total HTC clients served

Total HIV tested	8,069	100%
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Sex

Males tested	4,522	56%
Females tested	3,547	44%
Females non-pregnant	3,188	90%
Females pregnant	359	10%

HTC site report

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

HTC client details

*

Age

Children 0-14 yrs	405	5%
Children below 12 mths (Age group A)	1	0%
Children 12 mths - 14 yrs (Age group B)	404	100%
Adults 15+ years	7,664	95%
Young adults 15-24 years (Age group C)	3,976	52%
Older adults 25+ yrs (Age group D)	3,688	48%

HTC access type

PITC	5,149	64%
Family Referral Slip (FRS)	176	2%
Other (VCT, etc.) HTC access	2,744	34%

HTC first time / repeat

Never tested before	3,003	37%
Previously accessed HTC	5,066	63%
Last negative	4,891	97%
Last positive	162	3%
Last exposed infant	10	0%
Last inconclusive	3	0%

Counseling session type / Partner present

Counseled with partner / partner present	746	9%
Counseled alone / Partner not present	7,323	91%

Outcome summary (HIV test)

Single test negative	7,659	95%
Single test positive	0	0%
Test 1&2 negative	1	0%
Test 1&2 positive	398	5%
Test 1&2 discordant	11	0%

Final result given to client

Results among clients never tested / last negative	7,899	98%
New negative	7,658	97%
New positive	234	3%
New positive (non-sex dissag)	24	10%
New positive (dissag by sex)	210	90%
New positive male	119	57%
New positive female	91	43%
New inconclusive	7	0%
New exposed infants	0	0%
Confirmatory results (previous positive clients)	170	2%
Confirmatory positive	170	100%
Confirmatory positive (non-sex dissag)	16	9%
Confirmatory positive (dissag by sex)	154	91%
Confirmatory positive male	84	55%
Confirmatory positive female	70	45%
Confirmatory inconclusive	0	0%

HTC site report

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

HTC client details

*

Partner / Family HTC referral slips

Sum of slips given	350	100%
Total clients presenting with referral slip	176	50%
Total failed referrals (slips not returned)	174	50%

Clients returning to facility after self-test

HTC client details

*

Total HTC clients served

Total HIV tested	1,444	100%
------------------	-------	------

Sex

Males tested	497	34%
Females tested	947	66%
Females non-pregnant	854	90%
Females pregnant	93	10%

Age

Children 0-14 yrs	21	1%
Children below 12 mths (Age group A)	0	0%
Children 12 mths - 14 yrs (Age group B)	21	100%
Adults 15+ years	1,423	99%
Young adults 15-24 years (Age group C)	522	37%
Older adults 25+ yrs (Age group D)	901	63%

HTC access type

PITC	824	57%
Family Referral Slip (FRS)	43	3%
Other (VCT, etc.) HTC access	577	40%

HTC first time / repeat

Never tested before	87	6%
Previously accessed HTC	1,357	94%
Last negative	667	49%
Last positive	688	51%
Last exposed infant	0	0%
Last inconclusive	2	0%

Counseling session type / Partner present

Counseled with partner / partner present	345	24%
Counseled alone / Partner not present	1,099	76%

Outcome summary (HIV test)

Single test negative	721	50%
Single test positive	6	0%
Test 1&2 negative	61	4%
Test 1&2 positive	635	44%
Test 1&2 discordant	21	1%

HTC site report

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

HTC client details

*

Final result given to client

Results among clients never tested / last negative	796	55%
New negative	764	96%
New positive	13	2%
New positive (non-sex dissag)	0	0%
New positive (dissag by sex)	13	100%
New positive male	4	31%
New positive female	9	69%
New inconclusive	18	2%
New exposed infants	1	0%
Confirmatory results (previous positive clients)	648	45%
Confirmatory positive	628	97%
Confirmatory positive (non-sex dissag)	2	0%
Confirmatory positive (dissag by sex)	626	100%
Confirmatory positive male	208	33%
Confirmatory positive female	418	67%
Confirmatory inconclusive	20	3%

Partner / Family HTC referral slips

Sum of slips given	363	100%
Total clients presenting with referral slip	43	12%
Total failed referrals (slips not returned)	320	88%

HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

ANC clinic

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	4,245	100%
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Sex

Male recipients	675	16%
Female recipients	3,570	84%
Non-pregnant	1,052	29%
Pregnant	2,518	71%

Last HIV test of recipient

Never tested	314	7%
Previously tested	3,931	93%
Last negative	3,874	99%
Last positive	57	1%
Not on ART	10	18%
On art	47	82%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	6,446	100%
-----------------------------------------------	-------	------

Intended end user distribution type

Self (recipient)	1,697	26%
Secondary distribution	4,749	74%
Sex-partner	3,801	80%
Other	948	20%

Intended end user sex / age category

Total males	4,067	63%
Boys 13-14 years old	97	2%
Adolescent boys and young men 15-24 years old	1,293	32%
Adolescent boys 15 - 19 years old	216	17%
Young men 20 - 24 years old	1,077	83%
Adults	2,677	66%
Young adults 25 - 35 years old	1,765	66%
Middle adults 36 - 49 years old	843	31%
Older adults 50+	69	3%
Total females	2,379	37%
Girls 13-14 years old	138	6%
Adolescent girls and young women 15-24 years	1,170	49%
Adolescent girls 15 - 19 years old	516	44%
Young women 20 - 24 years old	654	56%
Adults	1,071	45%
Young adults 25 - 35 years old	770	72%
Middle adults 36 - 49 years old	263	25%
Older adults 50+	38	4%

Total condoms

Total condoms distributed	9,093	100%
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HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternity

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	1,748	100%
------------------------------------	-------	------

Sex

Male recipients	305	17%
Female recipients	1,443	83%
Non-pregnant	1,424	99%
Pregnant	19	1%

Last HIV test of recipient

Never tested	108	6%
Previously tested	1,640	94%
Last negative	1,636	100%
Last positive	4	0%
Not on ART	1	25%
On art	3	75%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	2,305	100%
-----------------------------------------------	-------	------

Intended end user distribution type

Self (recipient)	659	29%
Secondary distribution	1,646	71%
Sex-partner	1,591	97%
Other	55	3%

Intended end user sex / age category

Total males	1,668	72%
Boys 13-14 years old	50	3%
Adolescent boys and young men 15-24 years old	689	41%
Adolescent boys 15 - 19 years old	213	31%
Young men 20 - 24 years old	476	69%
Adults	929	56%
Young adults 25 - 35 years old	573	62%
Middle adults 36 - 49 years old	330	36%
Older adults 50+	26	3%
Total females	651	28%
Girls 13-14 years old	2	0%
Adolescent girls and young women 15-24 years	293	45%
Adolescent girls 15 - 19 years old	113	39%
Young women 20 - 24 years old	180	61%
Adults	356	55%
Young adults 25 - 35 years old	247	69%
Middle adults 36 - 49 years old	101	28%
Older adults 50+	8	2%

Total condoms

Total condoms distributed	2,350	100%
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HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

ART clinic

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	4,409	100%
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Sex

Male recipients	1,971	45%
Female recipients	2,438	55%
Non-pregnant	2,198	90%
Pregnant	240	10%

Last HIV test of recipient

Never tested	538	12%
Previously tested	3,871	88%
Last negative	3,382	87%
Last positive	489	13%
Not on ART	18	4%
On art	471	96%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	9,655	100%
-----------------------------------------------	-------	------

Intended end user distribution type

Self (recipient)	3,085	32%
Secondary distribution	6,570	68%
Sex-partner	3,886	59%
Other	2,684	41%

Intended end user sex / age category

Total males	4,862	50%
Boys 13-14 years old	201	4%
Adolescent boys and young men 15-24 years old	1,296	27%
Adolescent boys 15 - 19 years old	462	36%
Young men 20 - 24 years old	834	64%
Adults	3,365	69%
Young adults 25 - 35 years old	1,706	51%
Middle adults 36 - 49 years old	1,323	39%
Older adults 50+	336	10%
Total females	4,793	50%
Girls 13-14 years old	333	7%
Adolescent girls and young women 15-24 years	1,921	40%
Adolescent girls 15 - 19 years old	781	41%
Young women 20 - 24 years old	1,140	59%
Adults	2,539	53%
Young adults 25 - 35 years old	1,646	65%
Middle adults 36 - 49 years old	799	31%
Older adults 50+	94	4%

Total condoms

Total condoms distributed	15,346	100%
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HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

HTC room

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	88,762	100%
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Sex

Male recipients	41,360	47%
Female recipients	47,402	53%
Non-pregnant	41,998	89%
Pregnant	5,404	11%

Last HIV test of recipient

Never tested	9,225	10%
Previously tested	79,537	90%
Last negative	78,018	98%
Last positive	1,495	2%
Not on ART	252	17%
On art	1,243	83%
Last inconclusive	24	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	145,371	100%
-----------------------------------------------	---------	------

Intended end user distribution type

Self (recipient)	73,919	51%
Secondary distribution	71,452	49%
Sex-partner	55,964	78%
Other	15,488	22%

Intended end user sex / age category

Total males	71,118	49%
Boys 13-14 years old	1,170	2%
Adolescent boys and young men 15-24 years old	21,856	31%
Adolescent boys 15 - 19 years old	7,199	33%
Young men 20 - 24 years old	14,657	67%
Adults	48,092	68%
Young adults 25 - 35 years old	28,096	58%
Middle adults 36 - 49 years old	17,416	36%
Older adults 50+	2,580	5%
Total females	74,253	51%
Girls 13-14 years old	1,838	2%
Adolescent girls and young women 15-24 years	34,228	46%
Adolescent girls 15 - 19 years old	13,547	40%
Young women 20 - 24 years old	20,681	60%
Adults	38,187	51%
Young adults 25 - 35 years old	25,756	67%
Middle adults 36 - 49 years old	11,068	29%
Older adults 50+	1,363	4%

Total condoms

Total condoms distributed	1,001,834	100%
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HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Other point in HF

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	12,999	100%
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Sex

Male recipients	6,425	49%
Female recipients	6,574	51%
Non-pregnant	5,650	86%
Pregnant	924	14%

Last HIV test of recipient

Never tested	1,312	10%
Previously tested	11,687	90%
Last negative	11,552	99%
Last positive	133	1%
Not on ART	14	11%
On art	119	89%
Last inconclusive	2	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	21,837	100%
-----------------------------------------------	--------	------

Intended end user distribution type

Self (recipient)	11,085	51%
Secondary distribution	10,752	49%
Sex-partner	8,358	78%
Other	2,394	22%

Intended end user sex / age category

Total males	11,635	53%
Boys 13-14 years old	215	2%
Adolescent boys and young men 15-24 years old	4,104	35%
Adolescent boys 15 - 19 years old	1,662	40%
Young men 20 - 24 years old	2,442	60%
Adults	7,316	63%
Young adults 25 - 35 years old	4,410	60%
Middle adults 36 - 49 years old	2,619	36%
Older adults 50+	287	4%
Total females	10,202	47%
Girls 13-14 years old	415	4%
Adolescent girls and young women 15-24 years	4,885	48%
Adolescent girls 15 - 19 years old	2,065	42%
Young women 20 - 24 years old	2,820	58%
Adults	4,902	48%
Young adults 25 - 35 years old	3,358	69%
Middle adults 36 - 49 years old	1,353	28%
Older adults 50+	191	4%

Total condoms

Total condoms distributed	67,519	100%
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HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

VCT stand-alone

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	531	100%
------------------------------------	-----	------

Sex

Male recipients	303	57%
Female recipients	228	43%
Non-pregnant	218	96%
Pregnant	10	4%

Last HIV test of recipient

Never tested	17	3%
Previously tested	514	97%
Last negative	512	100%
Last positive	2	0%
Not on ART	2	100%
On art	0	0%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	766	100%
-----------------------------------------------	-----	------

Intended end user distribution type

Self (recipient)	486	63%
Secondary distribution	280	37%
Sex-partner	246	88%
Other	34	12%

Intended end user sex / age category

Total males	425	55%
Boys 13-14 years old	4	1%
Adolescent boys and young men 15-24 years old	114	27%
Adolescent boys 15 - 19 years old	25	22%
Young men 20 - 24 years old	89	78%
Adults	307	72%
Young adults 25 - 35 years old	181	59%
Middle adults 36 - 49 years old	109	36%
Older adults 50+	17	6%
Total females	341	45%
Girls 13-14 years old	5	1%
Adolescent girls and young women 15-24 years	146	43%
Adolescent girls 15 - 19 years old	41	28%
Young women 20 - 24 years old	105	72%
Adults	190	56%
Young adults 25 - 35 years old	145	76%
Middle adults 36 - 49 years old	43	23%
Older adults 50+	2	1%

Total condoms

Total condoms distributed	2,616	100%
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HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Workplace formal

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	1,613	100%
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Sex

Male recipients	1,182	73%
Female recipients	431	27%
Non-pregnant	321	74%
Pregnant	110	26%

Last HIV test of recipient

Never tested	225	14%
Previously tested	1,388	86%
Last negative	1,377	99%
Last positive	11	1%
Not on ART	3	27%
On art	8	73%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	2,351	100%
-----------------------------------------------	-------	------

Intended end user distribution type

Self (recipient)	1,479	63%
Secondary distribution	872	37%
Sex-partner	756	87%
Other	116	13%

Intended end user sex / age category

Total males	1,576	67%
Boys 13-14 years old	13	1%
Adolescent boys and young men 15-24 years old	549	35%
Adolescent boys 15 - 19 years old	231	42%
Young men 20 - 24 years old	318	58%
Adults	1,014	64%
Young adults 25 - 35 years old	599	59%
Middle adults 36 - 49 years old	385	38%
Older adults 50+	30	3%
Total females	775	33%
Girls 13-14 years old	34	4%
Adolescent girls and young women 15-24 years	356	46%
Adolescent girls 15 - 19 years old	153	43%
Young women 20 - 24 years old	203	57%
Adults	385	50%
Young adults 25 - 35 years old	279	72%
Middle adults 36 - 49 years old	94	24%
Older adults 50+	12	3%

Total condoms

Total condoms distributed	8,406	100%
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HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Workplace informal

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	781	100%
------------------------------------	-----	------

Sex

Male recipients	401	51%
Female recipients	380	49%
Non-pregnant	337	89%
Pregnant	43	11%

Last HIV test of recipient

Never tested	52	7%
Previously tested	729	93%
Last negative	690	95%
Last positive	39	5%
Not on ART	1	3%
On art	38	97%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	1,790	100%
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Intended end user distribution type

Self (recipient)	586	33%
Secondary distribution	1,204	67%
Sex-partner	766	64%
Other	438	36%

Intended end user sex / age category

Total males	847	47%
Boys 13-14 years old	53	6%
Adolescent boys and young men 15-24 years old	207	24%
Adolescent boys 15 - 19 years old	67	32%
Young men 20 - 24 years old	140	68%
Adults	587	69%
Young adults 25 - 35 years old	312	53%
Middle adults 36 - 49 years old	234	40%
Older adults 50+	41	7%
Total females	943	53%
Girls 13-14 years old	59	6%
Adolescent girls and young women 15-24 years	379	40%
Adolescent girls 15 - 19 years old	161	42%
Young women 20 - 24 years old	218	58%
Adults	505	54%
Young adults 25 - 35 years old	304	60%
Middle adults 36 - 49 years old	162	32%
Older adults 50+	39	8%

Total condoms

Total condoms distributed	7,375	100%
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HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Hotspot

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	1,506	100%
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Sex

Male recipients	419	28%
Female recipients	1,087	72%
Non-pregnant	1,085	100%
Pregnant	2	0%

Last HIV test of recipient

Never tested	172	11%
Previously tested	1,334	89%
Last negative	1,313	98%
Last positive	21	2%
Not on ART	10	48%
On art	11	52%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	2,060	100%
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Intended end user distribution type

Self (recipient)	1,427	69%
Secondary distribution	633	31%
Sex-partner	520	82%
Other	113	18%

Intended end user sex / age category

Total males	813	39%
Boys 13-14 years old	1	0%
Adolescent boys and young men 15-24 years old	212	26%
Adolescent boys 15 - 19 years old	62	29%
Young men 20 - 24 years old	150	71%
Adults	600	74%
Young adults 25 - 35 years old	367	61%
Middle adults 36 - 49 years old	227	38%
Older adults 50+	6	1%
Total females	1,247	61%
Girls 13-14 years old	23	2%
Adolescent girls and young women 15-24 years	595	48%
Adolescent girls 15 - 19 years old	208	35%
Young women 20 - 24 years old	387	65%
Adults	629	50%
Young adults 25 - 35 years old	485	77%
Middle adults 36 - 49 years old	141	22%
Older adults 50+	3	0%

Total condoms

Total condoms distributed	24,822	100%
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HIV self-test (ST) distribution

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Other community point

HIV self test client details

*

Total HIV self-test kit

Total HIV self-test kit recipients	13,476	100%
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Sex

Male recipients	7,145	53%
Female recipients	6,331	47%
Non-pregnant	6,226	98%
Pregnant	105	2%

Last HIV test of recipient

Never tested	2,690	20%
Previously tested	10,786	80%
Last negative	10,653	99%
Last positive	130	1%
Not on ART	29	22%
On art	101	78%
Last inconclusive	3	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	19,206	100%
-----------------------------------------------	--------	------

Intended end user distribution type

Self (recipient)	12,742	66%
Secondary distribution	6,464	34%
Sex-partner	4,732	73%
Other	1,732	27%

Intended end user sex / age category

Total males	10,767	56%
Boys 13-14 years old	180	2%
Adolescent boys and young men 15-24 years old	3,749	35%
Adolescent boys 15 - 19 years old	1,385	37%
Young men 20 - 24 years old	2,364	63%
Adults	6,838	64%
Young adults 25 - 35 years old	4,097	60%
Middle adults 36 - 49 years old	2,433	36%
Older adults 50+	308	5%
Total females	8,439	44%
Girls 13-14 years old	586	7%
Adolescent girls and young women 15-24 years	4,460	53%
Adolescent girls 15 - 19 years old	2,041	46%
Young women 20 - 24 years old	2,419	54%
Adults	3,393	40%
Young adults 25 - 35 years old	2,316	68%
Middle adults 36 - 49 years old	950	28%
Older adults 50+	127	4%

Total condoms

Total condoms distributed	50,840	100%
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HIV DNA PCR sample log report

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

DNA PCR samples

*

Total DNA PCR samples

Total DNA PCR samples collected	8,780	100%
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Reason for test

EID initial	8,389	96%
Confirmatory DNA-PCR	257	3%
Confirmatory after initial positive DNA-PCR	172	67%
Confirmatory after initial positive rapid test	85	33%
Tie-breaker	41	0%
Repeat	93	1%

Sample type

DBS	7,235	82%
Point of care	1,538	18%
Other	7	0%

Test result

Results received	7,616	87%
Conclusive	7,584	100%
Negative	7,250	96%
Positive	334	4%
Indeterminate	32	0%
Sample rejected	88	1%
Result missing	1,076	12%

Mother - guardian notification

0 - 4 weeks	4,234	48%
5 - 8 weeks	1,039	12%
9 - 12 weeks	207	2%
13+ weeks	3,300	38%

Blood safety

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Infect. disease screening among potential donors

*

HIV screening

HIV testing not done	845	21%
Tested for HIV	3,088	79%
HIV negative	2,991	97%
HIV positive	97	3%

Hepatitis B screening

HepB testing not done	835	21%
Tested for Hepatitis B	3,098	79%
HepB Negative	3,003	97%
HepB Positive	95	3%

Hepatitis C screening

HepC testing not done	1,640	42%
Tested for Hepatitis C	2,293	58%
HepC Negative	2,283	100%
HepC Positive	10	0%

Syphilis screening

Syphilis testing not done	861	22%
Tested for Syphilis	3,072	78%
Syphilis Negative	2,973	97%
Syphilis Positive	99	3%

Malaria screening

Malaria testing not done	852	22%
Tested for malaria	3,081	78%
Malaria Negative	2,851	93%
Malaria Positive	230	7%

Summary screening outcome

Not donated	1,341	34%
Donated	2,592	66%
Screened for at least HIV, HepB and syphilis	1,932	75%
Screened for HIV, HepB, HepC, Syphilis, Malaria	1,878	97%
Screened for HIV, HepB, Syphilis	54	3%
Screened for HIV, HepB	89	3%
Screened for HIV only	1	0%
Screened with any other combination of tests	570	22%

Cross-matching report

*

Blood group typing (for units and patients)

Total blood group typing done	21,867	100%
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Blood units cross-matched (by source)

Total blood units cross-matched	19,576	100%
Total units from MBTS (estimated)	16,984	87%
Total units from replacement donors	2,592	13%

Blood units cross-matched by patient group

Units cross-matched for maternity	4,440	23%
Units cross-matched for paediatrics	4,590	23%
Units cross-matched for other ward	10,546	54%

Blood safety

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Cross-matching report

*

Transfusion reactions

Units transfused without adverse events	19,456	99%
Units with suspected transfusion reactions	91	0%
Units with confirmed transfusion reactions	29	0%

2021 Q4 (Quarter)

Assessment details

*

Potential PrEP clients assessed

Total clients assessed	7,796	100%
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Acute HIV infection assessment

AHI assessment not done	97	1%
AHI assessment done	7,699	99%
AHI not suspected	7,617	99%
AHI suspected	82	1%

Baseline renal function screening

Creatinine sample not collected	418	5%
Creatinine sample collected	7,378	95%
Creatinine result pending	6,707	91%
Creatinine result available	671	9%
60+ ml/min clearance	646	96%
<60 ml/min clearance	25	4%

Baseline Hep test

Hep B test not done	5,864	75%
Hep B test done	1,932	25%
Negative	1,883	97%
Positive	49	3%

PrEP assessment outcomes

Total clients not eligible to start PrEP	626	8%
Initial HIV+ result	56	9%
Initial HIV- result	570	91%
Acute HIV infection suspected	57	10%
Acute HIV infection not suspected	513	90%
Low HIV risk	499	97%
High HIV risk	14	3%
Suspected kidney failure	14	100%
Total clients eligible to start PrEP	7,170	92%
Agreed to start PrEP	6,596	92%
Refused PrEP	574	8%

Registration details

*

PrEP clinic registrations

Total PrEP clinic registrations	6,502	100%
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Sex

Males	2,802	43%
Non-circumcised	1,387	50%
Circumcised	1,415	50%
Females	3,700	57%
Non-pregnant	3,288	89%
Pregnant	225	6%
Breastfeeding	187	5%

2021 Q4 (Quarter)

Registration details

*

Registration type

First time (PrEP_New)	6,419	99%
Males	2,812	44%
Adolescent boys and young men 15-24 years	1,162	41%
Adolescent boys 15-19 years old	286	25%
Young men 20-24 years old	876	75%
Adults	1,650	59%
Young adults 25-35 years old	1,017	62%
Middle adults 36-49 years old	517	31%
Older adults 50+	116	7%
Females	3,607	56%
Adolescent girls young women 15-24 years	1,862	52%
Adolescent girls 15-19 years old	675	36%
Young women 20-24 years old	1,187	64%
Adults	1,745	48%
Young adults 25-35 years old	1,139	65%
Middle adults 36-49 years old	550	32%
Older adults 50+	56	3%
Re-initiation	51	1%
Transfer-in	32	0%

PrEP current

*

Individuals that received PrEP atleast once in Qtr

Total PrEP current (PrEP_Curr)	81	100%
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Sex

Males	80	99%
Adolescent boys and young men 15-24 years	25	31%
Adolescent boys 15-19 years old	0	0%
Young men 20-24 years old	25	100%
Adults	55	69%
Young adults 25-35 years old	39	71%
Middle adults 36-49 years old	14	25%
Older adults 50+	2	4%
Females	1	1%
Adolescent girls young women 15-24 years	0	0%
Adolescent girls 15-19 years old	0	
Young women 20-24 years old	0	
Adults	1	100%
Young adults 25-35 years old	1	100%
Middle adults 36-49 years old	0	0%
Older adults 50+	0	0%

Three-month test

Test not done	0	0%
Test done	81	100%
Negative	81	100%
Positive	0	0%

Assessment details

*

Potential PrEP clients assessed

Total clients assessed	13,835	100%
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Acute HIV infection assessment

AHI assessment not done	150	1%
AHI assessment done	13,685	99%
AHI not suspected	13,525	99%
AHI suspected	160	1%

Baseline renal function screening

Creatinine sample not collected	879	6%
Creatinine sample collected	12,956	94%
Creatinine result pending	10,848	84%
Creatinine result available	2,108	16%
60+ ml/min clearance	1,887	90%
<60 ml/min clearance	221	10%

Baseline Hep test

Hep B test not done	10,579	76%
Hep B test done	3,256	24%
Negative	3,173	97%
Positive	83	3%

PrEP assessment outcomes

Total clients not eligible to start PrEP	945	7%
Initial HIV+ result	126	13%
Initial HIV- result	819	87%
Acute HIV infection suspected	99	12%
Acute HIV infection not suspected	720	88%
Low HIV risk	696	97%
High HIV risk	24	3%
Suspected kidney failure	24	100%
Total clients eligible to start PrEP	12,890	93%
Agreed to start PrEP	11,499	89%
Refused PrEP	1,391	11%

Registration details

*

PrEP clinic registrations

Total PrEP clinic registrations	11,221	100%
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Sex

Males	4,347	39%
Non-circumcised	2,131	49%
Circumcised	2,216	51%
Females	6,874	61%
Non-pregnant	6,132	89%
Pregnant	403	6%
Breastfeeding	339	5%

Registration details

*

Registration type

First time (PrEP_New)	11,078	99%
Males	4,360	39%
Adolescent boys and young men 15-24 years	1,699	39%
Adolescent boys 15-19 years old	376	22%
Young men 20-24 years old	1,323	78%
Adults	2,661	61%
Young adults 25-35 years old	1,561	59%
Middle adults 36-49 years old	858	32%
Older adults 50+	242	9%
Females	6,718	61%
Adolescent girls young women 15-24 years	3,282	49%
Adolescent girls 15-19 years old	1,113	34%
Young women 20-24 years old	2,169	66%
Adults	3,436	51%
Young adults 25-35 years old	2,250	65%
Middle adults 36-49 years old	1,083	32%
Older adults 50+	103	3%
Re-initiation	95	1%
Transfer-in	48	0%

PrEP outcome details

*

Primary follow-up outcomes

Loss to follow-up	2,212	21%
Died	164	2%
Retained	8,070	77%
HIV positive	21	0%
HIV negative	8,049	100%
Side effects	7	0%
No side effects	8,042	100%
Low risk	125	2%
High risk	7,917	98%
Quit	286	4%
Continue	7,631	96%
Transfer out	105	1%
Here	7,526	99%
STI current	857	11%
STI none	5,896	78%
STI screening not done	773	10%

HIV exposed child follow-up

Malawi (National)

2021 Q4 (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	9,631	100%
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CPT status

On CPT	8,146	85%
Not on CPT	1,485	15%

HIV status

Current HIV infection status unknown	2,341	24%
HIV infection not confirmed, not ART eligible	2,341	100%
HIV infection not confirmed, ART eligible (PSHD)	0	0%
Current HIV infection status known	7,290	76%
Confirmed not infected	7,206	99%
Confirmed infected (ART eligible)	84	1%

ART eligibility summary

Not eligible for ART	9,547	99%
ART eligible	84	1%
ART not initiated	0	0%
Initiated ART	84	100%

Primary follow-up outcome

Discharged uninfected	58	1%
Continue follow-up	8,106	94%
Started ART	84	1%
Defaulted	349	4%
Died	26	0%

Transfers between sites

Total not transferred out	8,623	90%
Transferred out	1,008	10%

Age 12 months

Age cohort outcomes

*

Total children in birth cohort

Total children registered	11,760	100%
---------------------------	--------	------

CPT status

On CPT	9,105	77%
Not on CPT	2,655	23%

HIV status

Current HIV infection status unknown	2,631	22%
HIV infection not confirmed, not ART eligible	2,628	100%
HIV infection not confirmed, ART eligible (PSHD)	3	0%
Current HIV infection status known	9,129	78%
Confirmed not infected	8,993	99%
Confirmed infected (ART eligible)	136	1%

HIV exposed child follow-up

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Age cohort outcomes

*

ART eligibility summary

Not eligible for ART	11,621	99%
ART eligible	139	1%
ART not initiated	1	1%
Initiated ART	138	99%

Primary follow-up outcome

Discharged uninfected	125	1%
Continue follow-up	9,053	86%
Started ART	138	1%
Defaulted	1,074	10%
Died	84	1%

Transfers between sites

Total not transferred out	10,474	89%
Transferred out	1,286	11%

Age 24 months

Age cohort outcomes

*

Total children in birth cohort

Total children registered	12,714	100%
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CPT status

On CPT	363	3%
Not on CPT	12,351	97%

HIV status

Current HIV infection status unknown	3,846	30%
HIV infection not confirmed, not ART eligible	3,842	100%
HIV infection not confirmed, ART eligible (PSHD)	4	0%
Current HIV infection status known	8,868	70%
Confirmed not infected	8,662	98%
Confirmed infected (ART eligible)	206	2%

ART eligibility summary

Not eligible for ART	12,504	98%
ART eligible	210	2%
ART not initiated	2	1%
Initiated ART	208	99%

Primary follow-up outcome

Discharged uninfected	8,218	75%
Continue follow-up	414	4%
Started ART	208	2%
Defaulted	1,954	18%
Died	149	1%

Transfers between sites

Total not transferred out	10,943	86%
Transferred out	1,771	14%

Antenatal Care

Malawi (National)

2021 Q4 (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	164,803	100%
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ANC cohort analysis

*

HIV status ascertainment

HIV status not ascertained	7,664	5%
HIV status ascertained	157,139	95%
Valid previous test result	7,714	5%
Previous negative	1,348	17%
Previous positive	6,366	83%
New test at ANC	149,425	95%
New negative	147,424	99%
New positive	2,001	1%

HIV status summary

Total women HIV negative	148,772	95%
Total women HIV positive	8,367	5%

PMTCT regimen mother

No ARVs	128	2%
Any ARVs	8,239	98%
ART (by time of initiation)	8,239	100%
Already on ART when starting ANC	6,314	77%
Started ART at 0-27 weeks of pregnancy	1,744	21%
Started ART at 28+ weeks of preg.	181	2%

ANC women after 6 months

ANC cohort analysis

*

Total women completing ANC in the reporting period

Total women in booking cohort	156,579	100%
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Syphilis status

Not tested for syphilis	43,682	28%
Tested for syphilis	112,897	72%
Syphilis negative	110,312	98%
Syphilis positive	2,585	2%

HIV status ascertainment

HIV status not ascertained	2,859	2%
HIV status ascertained	153,720	98%
Valid previous test result	8,246	5%
Previous negative	1,354	16%
Previous positive	6,892	84%
New test at ANC	145,474	95%
New negative	143,266	98%
New positive	2,208	2%

HIV status summary

Total women HIV negative	144,620	94%
Total women HIV positive	9,100	6%

Antenatal Care

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

ANC cohort analysis

*

CPT status (among HIV pos)

Not on CPT	81	1%
On CPT	9,019	99%

PMTCT regimen mother

No ARVs	54	1%
Any ARVs	9,046	99%
ART (by time of initiation)	9,046	100%
Already on ART when starting ANC	6,852	76%
Started ART at 0-27 weeks of pregnancy	1,947	22%
Started ART at 28+ weeks of preg.	247	3%

Baby's ARVs dispensed

No ARVs dispensed for infant	128	1%
ARVs dispensed for infant	8,972	99%

Maternity

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternal details

*

Admissions in the reporting period

Total admissions (referrals double-counted)	144,231	100%
Not referred to other site (total women)	135,360	94%
Referred out before delivery (multiple admissions)	8,871	6%

HIV status ascertainment

HIV status not ascertained	8,767	6%
HIV status ascertained	135,464	94%
Valid previous test result	8,084	6%
Previous negative	1	0%
Previous positive	8,083	100%
New test at maternity	127,380	94%
New negative	127,173	100%
New positive	207	0%

HIV status summary

Total women HIV negative	127,174	94%
Total women HIV positive	8,290	6%

ARVs during pregnancy (among HIV pos)

No ARV in pregnancy	0	0%
Any ARVs	8,290	100%
ART (by time of initiation)	8,290	100%
ART initiated before pregnancy	7,948	96%
ART initiated in 1st / 2nd trimester	169	2%
ART initiated in 3rd trimester	72	1%
ART initiated during labour	101	1%

Infant details

*

Single babies / multiple deliveries

Total babies delivered	138,013	100%
Single babies	133,299	97%
Twin / multiple babies	4,714	3%

Infant survival

Total live births	135,309	98%
Discharged alive	134,405	99%
Neonatal deaths	904	1%
Stillbirths	2,704	2%
Stillbirth, fresh	1,323	49%
Stillbirth, macerated	1,381	51%

HIV exposure / ARV proph. (among discharged alive)

Infants with unknown HIV exposure status	4,793	4%
Infants with known HIV exposure status	129,612	96%
Not HIV exposed	121,865	94%
HIV exposed	7,747	6%
Received no ARVs	282	4%
Received ARVs	7,465	96%
Nevirapine	7,465	100%

ART cohort analysis

Malawi (National)

2021 Q4 (Quarter)

Registration details

*

ART clinic registrations

Total ART clinic registrations	31,966	100%
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Registration type

ART initiations, first time (total patients)	19,463	61%
ART initiations, first time (non sex-disagg.)	38	0%
ART initiations, first time (by sex)	19,425	100%
ART initiations, first time, males	8,016	41%
ART initiations, first time, females	11,409	59%
ART initiations, first time, females non-pregnant	8,774	77%
ART initiations, first time, females pregnant	2,635	23%
ART re-initiations	260	1%
ART transfers in	12,243	38%

Sex

Males	12,047	38%
Females	19,919	62%
Non-pregnant	16,154	81%
Pregnant	3,765	19%

Age at ART initiation

Adults 15+ yrs	30,053	94%
Children 0-14 yrs	1,913	6%
Children 2-14 yrs	1,316	69%
Children below 24 mths	597	31%

Reason for starting ART

Presumed severe HIV Disease	25	0%
Confirmed HIV infection	31,903	100%
WHO stage 1 or 2	28,019	88%
CD4 below threshold	2,137	8%
CD4 unknown or >threshold	25,882	92%
PCR infants	105	0%
Children 12-59 mths	360	1%
Pregnant women	3,688	14%
Breastfeeding mothers	883	3%
Asymptomatic / mild	20,846	81%
WHO stage 3	2,967	9%
WHO stage 4	888	3%
Unknown / reason outside of guidelines	29	0%

TB at ART initiation

Never TB / TB > 24 months ago	31,357	98%
TB within the last 24 months	153	0%
Current episode of TB	418	1%

Kaposi's sarcoma at ART initiation

No KS	31,874	100%
Patients with KS	92	0%

ART cohort analysis

Malawi (National)

2021 Q4 (Cumulative)

Registration details

*

ART clinic registrations

Total ART clinic registrations	1,988,244	100%
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Registration type

ART initiations, first time (total patients)	1,567,716	79%
ART initiations, first time (non sex-disagg.)	290,716	19%
ART initiations, first time (by sex)	1,277,000	81%
ART initiations, first time, males	484,059	38%
ART initiations, first time, females	792,941	62%
ART initiations, first time, females non-pregnant	632,685	80%
ART initiations, first time, females pregnant	160,256	20%
ART re-initiations	26,949	1%
ART transfers in	393,579	20%

Sex

Males	743,303	37%
Females	1,244,941	63%
Non-pregnant	1,000,201	80%
Pregnant	244,740	20%

Age at ART initiation

Adults 15+ yrs	1,825,450	92%
Children 0-14 yrs	162,794	8%
Children 2-14 yrs	121,924	75%
Children below 24 mths	40,870	25%

Reason for starting ART

Presumed severe HIV Disease	4,475	0%
Confirmed HIV infection	1,983,769	100%
WHO stage 1 or 2	1,247,189	63%
CD4 below threshold	378,499	30%
CD4 unknown or >threshold	868,690	70%
PCR infants	5,019	1%
Children 12-59 mths	23,998	3%
Pregnant women	231,038	27%
Breastfeeding mothers	70,718	8%
Asymptomatic / mild	537,917	62%
WHO stage 3	593,313	30%
WHO stage 4	129,615	7%
Unknown / reason outside of guidelines	13,652	1%

TB at ART initiation

Never TB / TB > 24 months ago	1,911,150	96%
TB within the last 24 months	37,817	2%
Current episode of TB	39,277	2%

Kaposi's sarcoma at ART initiation

No KS	1,967,165	99%
Patients with KS	21,079	1%

ART cohort analysis

Malawi (National)

2021 Q4 (Cumulative)

ART outcomes

*

Primary follow-up outcomes

Total alive on ART	898,132	61%
Alive on ART at site of last registration	898,132	100%
Defaulted	427,158	29%
Stopped ART	15,198	1%
Total died	141,120	10%
Died month 1	25,353	18%
Died month 2	15,525	11%
Died month 3	10,284	7%
Died month 4+	89,958	64%

Transfers between sites

Total not transferred out	1,480,998	74%
Transferred out	507,246	26%

ART cohort analysis

Malawi (National)

2021 Q4 (Cumulative)

ART outcomes

*

ART regimens

First line regimens	893,136	99%
Adult formulation	876,608	98%
Regimen 0A	10	0%
Regimen 2A	108	0%
Regimen 4A	10	0%
Regimen 5A	1,571	0%
Regimen 6A	103	0%
Regimen 13A	853,785	97%
Regimen 14A	8,761	1%
Regimen 15A	12,243	1%
Regimen 16A	0	0%
Regimen 17A	17	0%
Paed. formulation	16,528	2%
Regimen 0P	6	0%
Regimen 2P	99	1%
Regimen 4P	8	0%
Regimen 16P	15	0%
Regimen 17P	3	0%
Regimen 14PA	65	0%
Regimen 14PP	103	1%
Regimen 15PA	7,628	46%
Regimen 15PP	8,601	52%
Regimen 4PP	0	0%
Regimen 4PA	0	0%
Regimen 17PP	0	0%
Regimen 17PA	0	0%
Second line regimens	4,575	1%
Adult formulation	2,400	52%
Regimen 7A	660	28%
Regimen 8A	1,399	58%
Regimen 9A	127	5%
Regimen 10A	82	3%
Regimen 11A	46	2%
Regimen 12A	86	4%
Paed. Formulation	2,175	48%
Regimen 9P Tabs	1,942	89%
Regimen 9P Gran	210	10%
Regimen 11P Tabs	20	1%
Regimen 11P Gran	3	0%
Regimen 11PP	0	0%
Regimen 11PA	0	0%
Third line regimens	0	0%
Paed. formulation	0	
Regimen 12PP	0	
Regimen 12PA	0	
Other regimen (adult / paed)	421	0%

ART cohort analysis

Malawi (National)

2021 Q4 (Cumulative)

ART outcomes

*

Adherence

Adherence unknown (not recorded)	19,555	2%
Adherence recorded	878,577	98%
0-3 doses missed	640,613	73%
4+ doses missed	237,964	27%

ART side effects

Side effects unknown (not recorded)	17,547	2%
Side effects recorded	880,585	98%
No side effects	878,406	100%
Any side effects	2,179	0%

Current TB status among ART patients (ICF)

ICF not done (Current TB status unknown/ not circ)	7,744	1%
ICF done	890,388	99%
TB not suspected	884,485	99%
TB suspected	2,890	0%
TB confirmed	3,013	0%
TB confirmed, not on treatment	110	4%
TB confirmed, on TB treatment	2,903	96%

Pregnant / Breastfeeding

Pregnant females	23,379	3%
Breastfeeding	50,795	6%
All others (not recorded)	823,958	92%

2021 Q4 (Quarter)

12 month survival children**Survival and retention in ART program**

*

ART cohort registration group outcomes

Total ART clinic registrations	1,817	100%
Transfers out (double counted)	331	18%
Total not transferred out (patients in cohort)	1,486	82%
Total alive on ART	1,211	81%
Total not retained	275	19%
Defaulted	160	58%
Stopped ART	30	11%
Died	85	31%

6 month survival OptionB+**Survival and retention in ART program**

*

ART cohort registration group outcomes

Total ART clinic registrations	3,558	100%
Transfers out (double counted)	488	14%
Total not transferred out (patients in cohort)	3,070	86%
Total alive on ART	2,627	86%
Total not retained	443	14%
Defaulted	395	89%
Stopped ART	34	8%
Died	14	3%

12 month survival OptionB+**Survival and retention in ART program**

*

ART cohort registration group outcomes

Total ART clinic registrations	4,661	100%
Transfers out (double counted)	841	18%
Total not transferred out (patients in cohort)	3,820	82%
Total alive on ART	3,134	82%
Total not retained	686	18%
Defaulted	620	90%
Stopped ART	46	7%
Died	20	3%

TB/HIV program

Malawi (National)

2021 Q4 (Quarter)

TB program report

*

TB clinic registrations

Total TB patients registered	3,817	100%
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HIV status ascertainment

HIV status not ascertained	45	1%
HIV status ascertained	3,772	99%
HIV negative	2,102	56%
HIV positive	1,670	44%
Already on ART	1,557	93%
Not on ART when starting TB treatment	113	7%

TB / ART program triangulation

*

HIV-burden among TB patients (estimated)

HIV negative (est. 40%)	1,527	40%
HIV positive (est. 60%) in need of ART	2,290	60%
Not on ART	733	32%
Total on ART (coverage)	1,558	68%
Already on ART (TB prog)	1,557	100%
Started ART within 24m of TB diagnosis (ART prog)	1	0%
ART initiations with current TB (ART prog)	0	73%
ART initiations after recent TB (ART prog)	0	27%

Viral load monitoring cohort report

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

VL samples collected in the reporting period

*

VL samples collected

Total VL samples	193,446	100%
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Reason for VL test

Routine / scheduled monitoring	172,431	89%
Extra-schedular	16,800	9%
Targeted (clinical suspicion of failure)	2,548	15%
Follow-up after high VL	14,252	85%
Replacement of lost sample / missing result	4,215	2%

Results for VL samples collected 6 months ago

*

Total VL samples with outcomes

Total VL samples collected 6 months ago	166,998	100%
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VL test results

Valid results	146,084	87%
<1000 copies / ml	134,432	92%
1000+ copies / ml	11,652	8%
Rejected samples / invalid results	1,587	1%
Missing / outstanding results	19,327	12%

Result transmission type

Paper results	129,731	87%
Electronic results	19,143	13%

Time from sample collection to receipt of results

0-4 Weeks	50,029	30%
5-8 Weeks	61,620	37%
9-12 Weeks	24,761	15%
13+ Weeks / still missing	30,588	18%

Time from sample collection to client notification

0-4 Weeks	20,127	12%
5-8 Weeks	26,216	16%
9-12 Weeks	35,240	21%
13+ Weeks / pending	85,415	51%

Patients with high VL: outcome after 6 months

*

Patients in high VL cohort

Total high VL patients evaluated after 6 months	10,612	100%
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Initial high VL: reason for test

Routine / scheduled monitoring	9,019	85%
Targeted (clinical suspicion of failure)	1,317	12%
Repeat sample	276	3%

Intensive adherence counselling

3 Sessions completed	8,148	77%
Sessions not completed	2,464	23%

Viral load monitoring cohort report

Malawi (National)

2021 Q4 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Patients with high VL: outcome after 6 months

*

Follow-up VL test

Follow-up sample collected	6,124	58%
Valid results	4,723	77%
<1000 copies / ml	3,208	68%
1000+ copies / ml	1,515	32%
Rejected samples / invalid results	44	1%
Missing / outstanding results	1,357	22%
Follow-up sample pending	4,488	42%

Preliminary opinion

Conclusion made	5,284	50%
Continue current regimen	4,795	91%
Switch to 2nd line ART	489	9%
Conclusion pending	5,328	50%

Final treatment decision (2nd line prescriber)

Decision made	4,895	46%
Continue current regimen	4,423	90%
Switch to 2nd line ART	411	8%
Refer to HIV specialist	61	1%
Decision pending	5,717	54%

STI site report

Malawi (National)

2021 Q4 (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	108,873	100%
Index patients treated (symptomatic)	89,490	82%
Partners treated	19,383	18%

Sex

Males	44,523	41%
Males Non-circumcised	30,052	67%
Males Circumcised	14,471	33%
Females	64,350	59%
Non-pregnant	55,318	86%
Pregnant	9,032	14%

Age group

Age group A (0-19 years)	9,677	9%
Age group B (20-24 years)	26,151	24%
Age group C (25+ years)	73,045	67%

Client type

Symptomatic cases	97,444	90%
Index cases	89,490	92%
Partners symptomatic	7,954	8%
Partners asymptomatic	11,429	10%

STI treatment history

Never treated for STI	80,584	74%
Previously treated for STI	28,289	26%
Old >3 months ago	21,402	76%
Recent =3 months ago	6,887	24%

STI syndromic diagnosis

GUD	13,139	11%
UD	31,758	27%
AVD	36,118	31%
Low risk	10,051	28%
High risk	26,067	72%
LAP	14,695	13%
SS	966	1%
BU	607	1%
BA	1,443	1%
NC	281	0%
Genital Warts	539	0%
Syphilis RPR VDRL	9,739	8%
Other STI	7,583	6%

STI partner notification

Total partner notification slips issued	23,774	100%
Total partners returned	19,383	82%
Total partners not seen	4,391	18%

STI site report

Malawi (National)

2021 Q4 (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	12,025	11%
HIV status ascertained	96,848	89%
HIV negative (new test)	78,283	81%
HIV positive	18,565	19%
New positive	2,200	12%
Previous positive	16,365	88%
Not on ART	525	3%
On ART	15,840	97%

STI clients referred for services

Lab	1,475	2%
Gynae review	1,124	2%
Surgical review	455	1%
Repeat HTC	45,214	75%
ART (for assessment)	5,285	9%
Other (service referrals)	3,624	6%
VMMC	2,793	5%