



Government of Malawi Ministry of Health

Integrated HIV Program Report

July-September 2020

- *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 (July-September 2020)

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 3 editions of a circular to all HIV service delivery sites (on 3rd, 17th April and 15th June) 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.

Access to most HIV services recovered slightly during Q3 as COVID case numbers remained low during Q3 2020 but it remained below targets and lower than in the pre-COVID period.

Scale-up of integrated Program performance highlights by the end of June 2020

- Scale-up of integrated HIV services had reached the following number of sites:
 - **763** static and **104** outreach HIV testing sites.
 - **754** (static) ART sites; **604** of these started at least one pregnant or breastfeeding woman.
 - **698** sites with HIV-exposed children in follow-up.
- **697,991** persons were tested for HIV and received their results; **117,885 (17%)** accessed HIV testing for the first time; **580,106 (83%)** were repeat testers and **22,638 (4%)** of these received confirmatory testing (after having tested positive in the past). **20,206 (3.0%)** clients received a positive result for the first time¹.
- A total of **108,030** people received **186,485** self-test kits for either primary or secondary use.
- **16,164 (95%)** of 16,961 blood units collected were screened for (at least) HIV, hepatitis B and syphilis.
- **155,128 (99%)** of 158,524 women at ANC had their HIV status ascertained; **10,253 (7%)** of these were HIV positive. **138,044 (94%)** of 147,191 at maternity had their HIV status ascertained **10,190 (7%)** of these were HIV positive.
- **19,384** patients started ART this quarter; **78%** were classified as asymptomatic / in WHO stage 1 and started under the “Test & Treat” policy.

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%.

- **852,425** patients were alive and on ART by end of September 2020.² This means that **79%** of the estimated 1,074,888 HIV positive population was on ART. ³ ART coverage was **84%** (48,661 / 57,317) for children⁴ and **79%** (804,364 / 1,017,572) for adults.
- **90,937 (94%)** 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 **75%** and **95%**, respectively.
- **75%** of adults and **79%** of children were retained alive on ART at 12 months after initiation.⁵
- Out of **825,529** patients on first line adult ART **15,952 (2%)** were on TDF/3TC/EFV and **782,340 (96%)** had transitioned to TDF/3TC/DTG.
- **11,802** ⁶ (**>99%**) of an estimated 10,364³ HIV infected pregnant women in Malawi were on ART this quarter. **9,762 (78%)** of these were already on ART when getting pregnant and **2,649 (22%)** started ART during pregnancy/delivery.
- An additional **672** breastfeeding women started ART in WHO stage 1 or 2.
- **79%** and **75%** of women started while pregnant or breastfeeding were retained on ART at **6 and 12 months** after initiation, respectively.
- **9,125 (7%)** of infants discharged alive from maternity were known to be HIV exposed, **8,808 (97%)** of these received ARV prophylaxis (nevirapine).
- A total of **13,411** HIV exposed children were newly enrolled for follow-up this quarter; **11,015 (82%)** of these were enrolled before age 2 months.
- Out of the total 1,074,888 estimated PLHIV by end September 2020:
- An estimated **91%** of PLHIV knew their status (diagnosed)
- **87%** of whom were on ART
- **94%** of whom were virally suppressed.⁷

² 852,425 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 2020 Spectrum Model estimates for the HIV population in September 2020.

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.

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

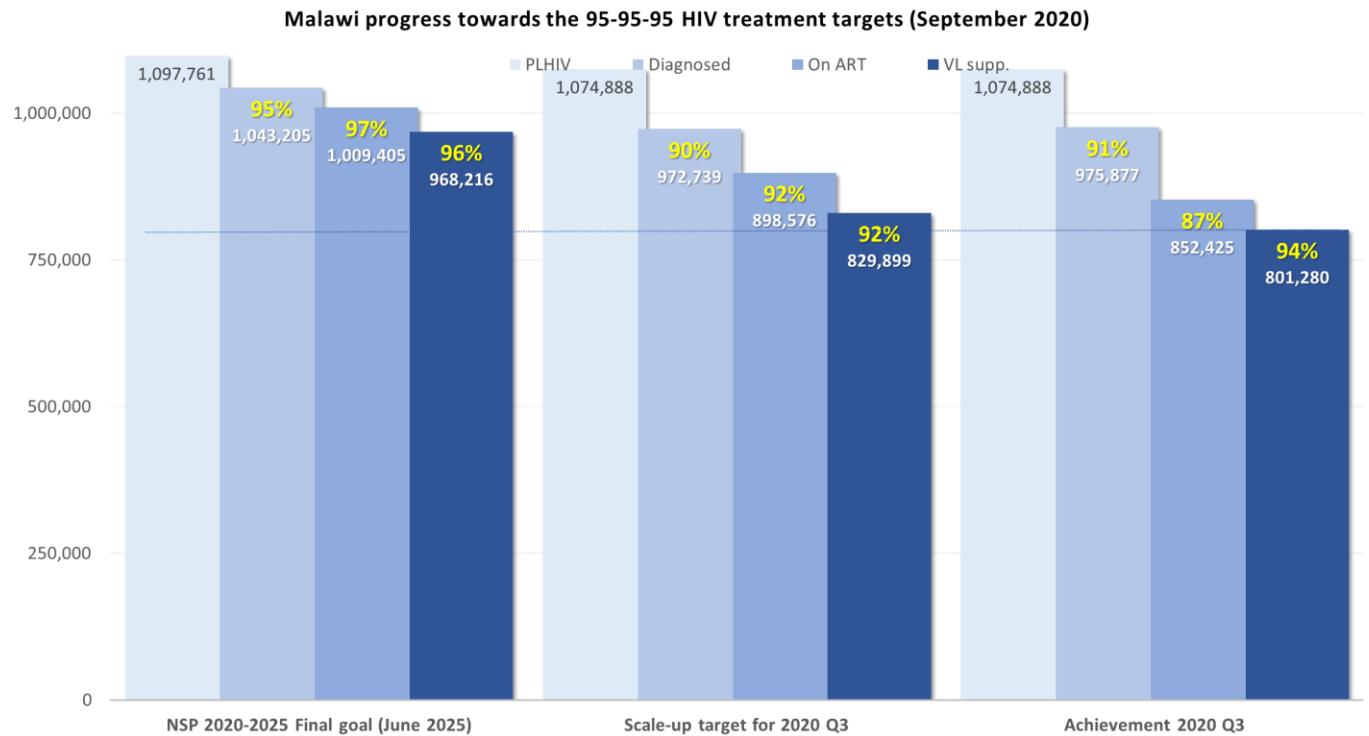
‘First 95’ (975,877 diagnosed): the 76.8% MPHIA estimate for adults (15-64) diagnosed (self-reported and/or presence of ARVs in blood sample) is assumed to represent the status for all PLHIV (Spectrum) by end of Q1 2016 ($1,014,106 \times 76.8\% = 778,833$); add: 262,675 = 47% of 579,453 people reported as newly diagnosed between April 2016 – September 2020 (HTS program data adjusted for an estimated 53% of repeat testers misclassified as newly diagnosed); subtract: 75,171 (82%) of 91,317 estimated deaths among all PLHIV (2020 Spectrum model) between April 2016 – September 2020 to account for deaths among the diagnosed population (on ART and not on ART).

‘Second 95’ (852,425 on ART): patients retained alive on ART by end Q2 2020 from routine ART program reports.

‘Third 95’ (801,280 virally suppressed): extrapolated from the 94% of patients with a routine VL monitoring result <1000 copies/ml this quarter, applied to the 852,425 patients on ART.

- This means that the Q3 2020 scale-up target for the population diagnosed was exceeded. The estimate for proportion of PLHIV who know their status was reduced from previous quarter (94%) based on a new standard model method for the “first 90” (UNAIDS “Shiny90” model). The new estimate implies that undisclosed repeat testers account for 53% of clients reported as “new positive” in routine HTS data between 2016 and 2020.
- The apparent gap between the estimated number of PLHIV diagnosed and those on ART has slightly declined to 123,425 individuals diagnosed but not on ART. This gap may be explained by increasing challenges with early ART uptake and retention among the large number of PLHIV diagnosed over the last quarters, many of whom were asymptomatic when diagnosed.
- Malawi has already achieved two of the 90-90-90 targets (for diagnosis and viral suppression) 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:

Figure 1



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

760 public and private sector facilities were visited for **clinical HIV program supervision** between 12th and 23rd of October 2020.

The large number of sites was covered by **241** supervisors working in **32** teams that spent 2,086 **working hours** at the sites. Each site visit lasted on average 3.5 hours, but up to 2 days were spent at the busiest sites. **544 (72%)** sites were awarded a *certificate for excellent performance*. This number is higher than the previous quarter (518). **115 (12%)** sites had significant weaknesses and were rated to require **intensive mentoring**. Mentoring capacity will need to be further expanded.

Table 1: Outcomes of integrated HIV services supervision for 2020 Q3

Zone	Total facil. visited*	Supervision hours spent at facilities		Performance (# and % of sites)	
		Total	Average per site	Excellent perform.	Mentoring needed
NZ	136	369	2.7	78 57%	34 25%
CEZ	107	253	2.4	80 75%	13 12%
CWZ	171	405	2.4	112 65%	28 16%
SEZ	170	562	3.3	129 76%	27 16%
SWZ	176	497	2.8	145 82%	13 7%
Malawi		760	2,086	2.7	544 72%
					115 15%

* 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. **236** sites had cumulatively registered more than 2,000 ART patient and **87** of these had registered more than 5,000. **207** (90%) 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 **725** static and **104 outreach** HIV testing sites in Q3 2020.

Table 1

Facilities with integrated HIV services in the 5 Zones. Availability of services defined by performance (at least 1 patient enrolled) during 2020 Q3

Zone	Total fac.(1)	Facilities providing HIV services				CD4 count machines (2)		
		Exp. child	Pre-ART	PMTCT B+	ART	Installed	Functional	Results
SEZ	171	162 95%	0 0%	152 89%	169 99%	17 10%	13 76%	593
SWZ	176	163 93%	0 0%	139 79%	175 99%	28 16%	26 93%	2,400
CWZ	172	146 85%	0 0%	132 77%	171 99%	17 10%	14 82%	1,056
CEZ	106	102 96%	0 0%	86 81%	106 100%	16 15%	14 88%	402
NZ	138	125 91%	0 0%	95 69%	133 96%	14 10%	7 50%	311
Malawi	763	698 91%	0 0%	604 79%	754 99%	92 12%	74 80%	4,762

(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 1 shows the distribution of the **763** sites designated to provide clinical HIV services in Q3 2020, by zone. At the national level, there were **754** (static) sites with at least one patient on ART; **604** sites had enrolled women under PMTCT Option B+; **698** 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 92 sites, and **74 (80%)** of these had produced at least 1 result during Q3 2020. The total number of CD4 results produced (**4,762**) was higher than previous quarter (3,495). **882 (19%)** of the 4,672 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.

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 2020 Q3 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 2

	2019 Q4		2020 Q1		2020 Q2		2020 Q3	
Clinicians	914	27%	821	28%	855	30%	874	28%
Nurses	1,378	41%	1,152	40%	1,165	41%	1,267	41%
Pharmacy staff	137	4%	116	4%	112	4%	122	4%
Auxiliary Staff	966	28%	800	28%	738	26%	831	27%
Total	3,395		2,889		2,870		3,094	

An estimated 4.0 million ART patient visits are currently managed at the 754 ART sites per annum, based on 852,425 patients alive on ART and an average dispensing interval of 2.5 months. With 260 working days per year, an average of 15,737 patient visits is therefore managed by the ART sites per working day. At current staffing levels, this translates into an average of **18** ART patient visits per clinician and **12** 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 9 on page 30).

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

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

- 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.

632 (87%) of the 726 active testing sites had documented at least 1 QC set this quarter and **4610 (84%)** had recorded the minimum of 12 sets (one for each week). At **616 (97%)** of sites, all samples produced the expected result.

5.2 HIV Testing and Counselling Outputs

697,991 people⁹ were tested and counselled for HIV between July and September 2020. This is a 9% increase from the previous quarter (634,564). 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”.

675,880 (97%) of all tests were performed at health facilities, **4,748 (1%)** were done in stand-alone HTC sites, **16,479 (2%)** were done outside of facilities / in the community and **884 (<1%)** were from self-test returning clients tested at the facility. **20,206** people were reported as newly diagnosed with HIV this quarter. Out of these, **19,700 (97%)** were diagnosed at health facilities; **132 (1%)** at stand-alone HTC sites; **333 (2%)** through community-based testing and **41 (<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).

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.

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 20,206 reported “new positives” results in an estimated **9,496** 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

534,710 (77%) of people tested were patients receiving provider-initiated testing and counselling (PITC); **149,939 (21%)** accessed voluntary testing and counselling, door-to-door, community-based testing, etc.; and **13,342 (1%)** came for testing with a *Family HTC Referral Slip* (FRS) that was issued to a family member at a prior HTS encounter. Based on a total of **31,383** FRS issued to index clients this quarter, the successful referral rate for family members was higher at **42%** ($13,242 / 31,383$) than last quarters at 33%. Issuance and utilization of FRS have increased considerably over the last quarters.

5.4 Age and sex distribution among HIV testing clients

Out of **697,991** people tested and counselled, **31%** were males and **69%** were females. **39%** of females were pregnant. The ratio of males (**43%**) to non-pregnant females (**57%**) has remained constant. Testing among pregnant women is almost entirely provider-initiated and there is no comparable access route targeting males.

174,168 (25%) of all people tested accessed HTC with their partners (as a couple).

52% of all people tested and counselled were 25 years and above, **42%** were adolescents or young adults (15-24 years) and **7%** were children (<15 years). **1,123 (<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 2020 Q2 to Q3 2020, the number of males, pregnant women and non-pregnant females tested recovered by 9%, 11% and 6% respectively.

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

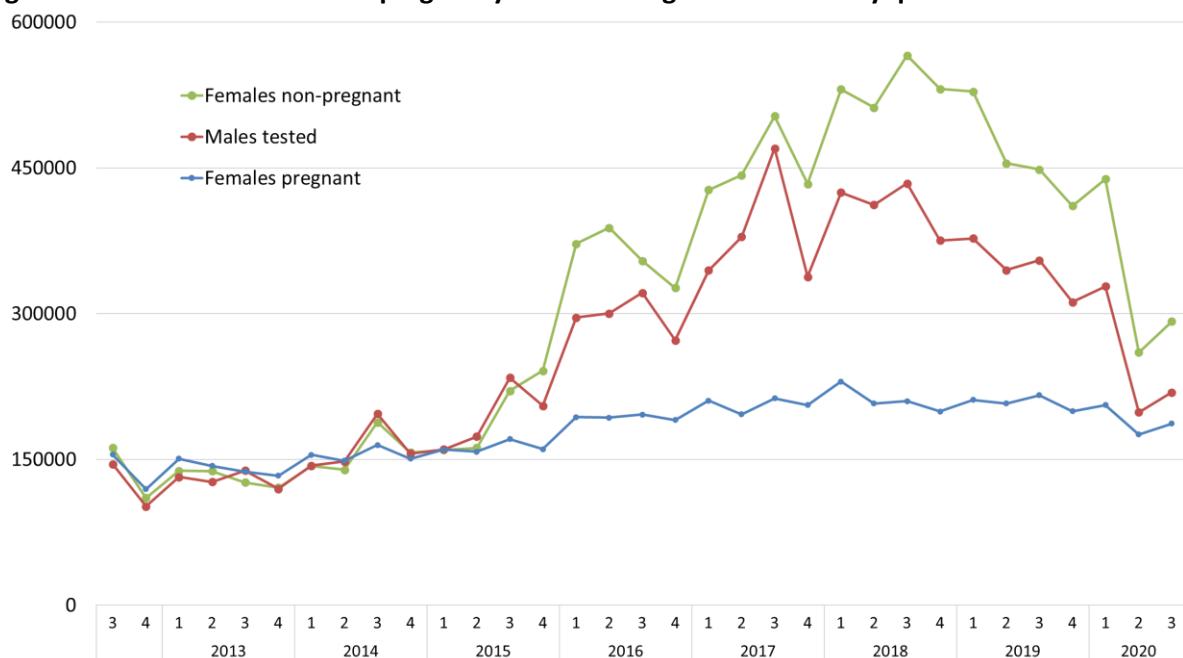
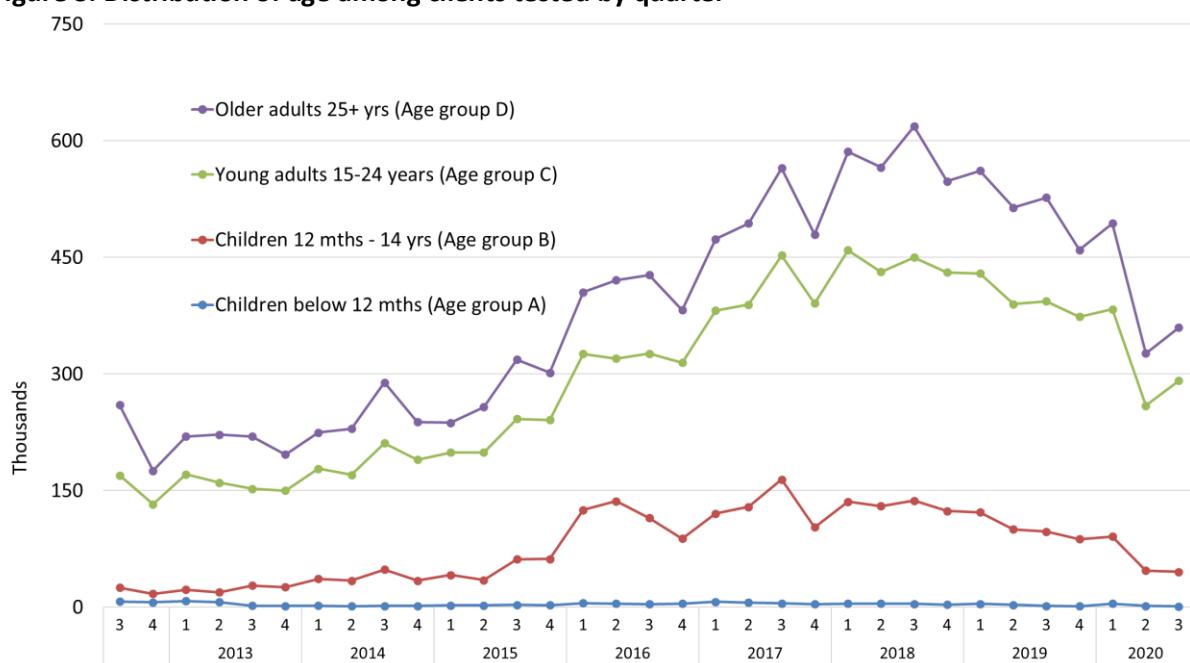


Figure 3: Distribution of age among clients tested by quarter



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.

117,885 (17 %) of all clients tested accessed testing for the first time and **580,106 (83%)** were repeat testers. Based on the cumulative number of people who accessed HTC for the first

time, a total of **11,926,837** 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.

20,206 (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 (**187**) and inconclusive test results (**474**) both accounted for <1 % of new results given to clients.

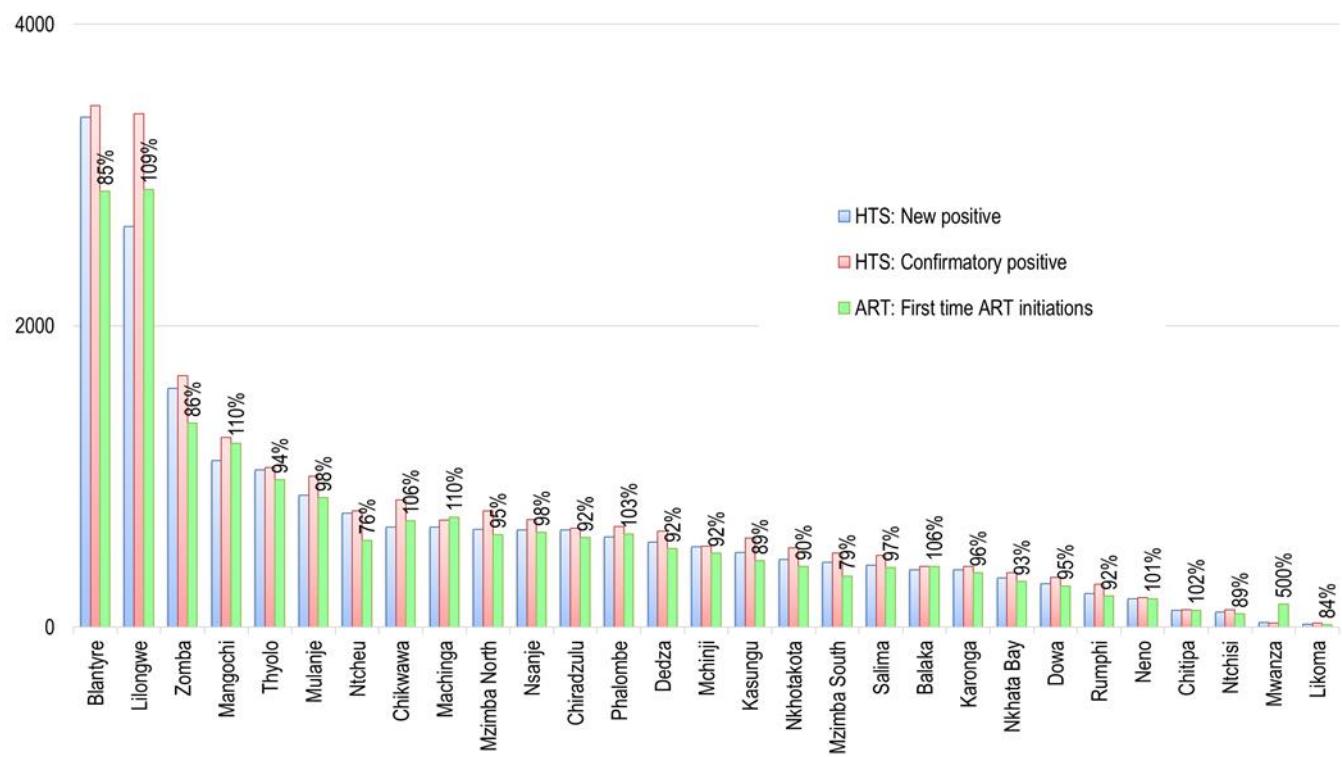
556,937 (96%) of 580,106 repeat testers reported a *last negative* result. **22,508 (4%)** were reported as *previous positives* and all of these should have been classified as receiving a confirmatory test. For most of these previous *positives*, testing was probably initiated by a health worker before ART initiation. As expected, the number of *confirmatory test results* (**22,638**) was very close to the number of previous positive clients. **22,510 (99%)** of 22,638 confirmatory test results were concordant positive and **128 (<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 **19,384** patients who initiated ART this quarter represent **96%** of the **22,510** clients tested positive for the first time. Proxy linkage rates ranged from 76% in Ntcheu to 500% in Mwanza. Blantyre had the highest number of new diagnoses (**3,383**) and ART initiations were at **2,892**, implying a district-level linkage of **85%**. Very high or low linkage rates suggest that cross-border access to testing and ART was seen in several districts (e.g. Mwanza, Ntcheu, Neno, Blantyre, etc.).

The number of confirmatory positives exceeded the number of new positives by 2,304 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 (745) of confirmatory positives compared with the number of new positives. Lilongwe, Blantyre, Zomba, Mangochi, Mulanje, Mzimba North, Nkhotakota, Dedza and Kasungu accounted for **1,659 (72%)** out of the 2,304 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 3,126 (14%).

Figure 4: Number of new positives, confirmatory positives and new ART initiations in Q3 2020 by district (percentages represent ART initiations over new positives for each district)



The full national HIV testing data are presented in the [Appendix](#).

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.

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. Routine 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 July and September 2020, **108,030** people were counselled and given a total of **186,487** 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 1.7 kits given to each recipient. **40%** of the 108,030 recipients were males and **60%** were females. **24%** of the females were pregnant.

Out of all recipients, **9,815 (9%)** had never been tested for HIV before and **98,213 (91%)** reported a previous test result. **92,831 (94%)** of previously tested recipients were negative and **6,198 (6%)** were positive. **5,127 (83%)** of the positives were on ART and **17%** were not ART. **184 (<1%)** recipients reported a previous inconclusive result.

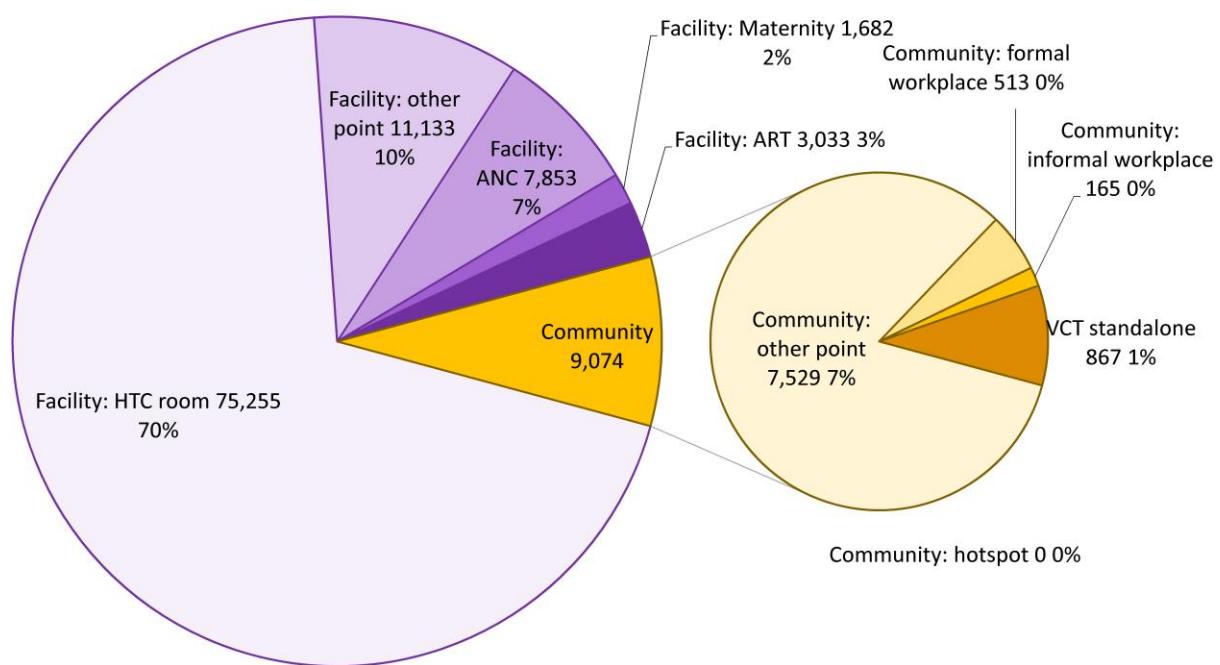
5.7.2 Distribution Points of HIVST Kits

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 2020 Q3. **98,956 (92%)** of all **108,030** recipients were seen at health facilities and **9,072 (8%)** in community settings. HTC rooms were the most common distribution point in facilities with **75,255 (70%)** recipients, followed by other facility points (**11,133**), ANC clinics (**7,853**), ART clinics (**3,033**) and Maternity (**1,687**). **7,529 (7%)** of clients received HIVST at unspecified community distribution points and VCT standalone distribution point accounted for **867 (1%)** of the recipients. Formal and informal workplaces distribution points accounted for <1% of recipients. None of the HIVST kits distributed were classified under community hotspot.

Figure 5

Number of HIV self-test recipients by distribution point (2020 Q3)

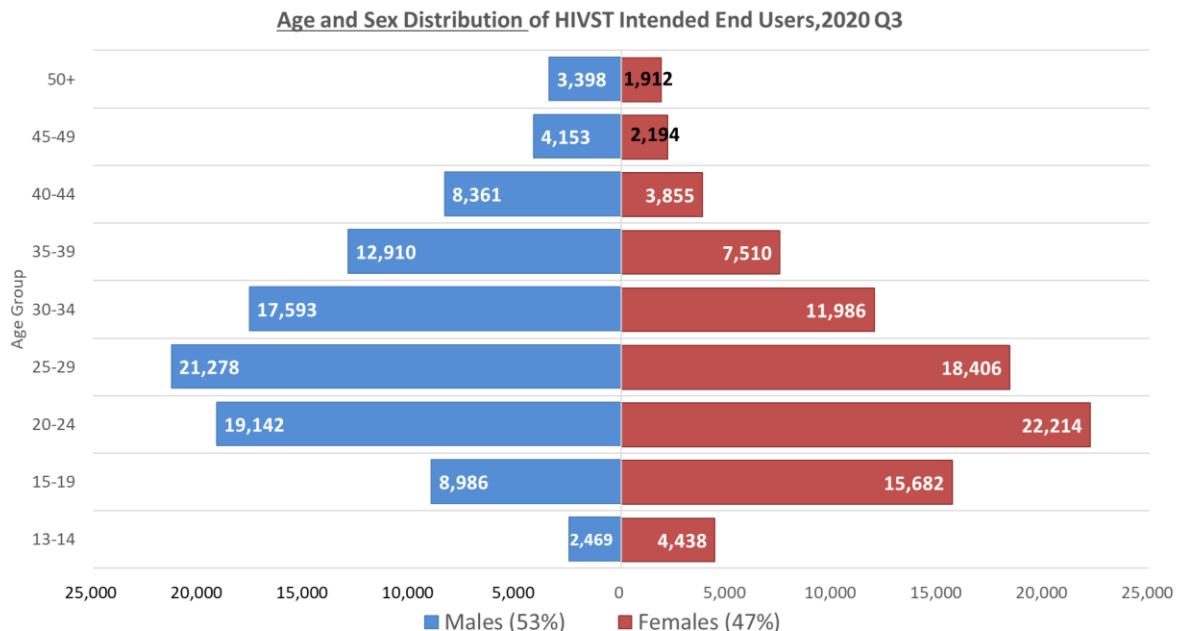


5.7.3 HIVST Distributed Kits: Intended User Attributes

Out of the **186,487** HIVST kits distributed in Q3 2020, **71,511 (38%)** were intended for self-use by the recipients and **114,976 (62%)** were for onward distribution. **80,825 (70%)** of the kits intended secondary distribution were for sexual partners and **34,151 (30%)** were for others, such as friends or relatives of the recipients.

Figure 6 below shows the intended end user age and sex category for all the test kits that were distributed during 2020 Q3. Out of **186,487** test kits distributed, **98,290 (53%)** were for males and **88,197 (47%)** for females. 72% of the male end users were 20-39 years and 64% 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.

(88%) of 691 sites with HIV exposed children in follow-up had collected and recorded at least 1 DNA-PCR sample during Q3 2020. 11,140 DNA-PCR samples were collected and recorded. By the time the logbooks were reviewed (between 1 and 3 weeks after the end of the quarter), results had been received at the sites for 8,411 (76%) of these specimens and 5,282 (63%) of these results had been communicated to the mother/guardian. The proportion of results received at the sites was 86%, 82% and 61% for samples collected in July, August September, respectively. A total of 279 (3%) results received at the sites 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 **16,961** blood units were collected in Malawi during Q3 2020. MBTS collected **(71%)** of these, **100%** of which were screened comprehensively for the relevant TTIs (HIV, Hepatitis B, Hepatitis C, syphilis, malaria). In addition, **54** hospitals in Malawi collected a total of 6,443 units from replacement donors. **4,917 (84%)** of these units were screened for at least the 3 key TTIs (HIV, HepB and syphilis) and **3,262 (79%)** of these were also screened for HepC and malaria. This means that a total of **16,164 (94%)** 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, **572** were screened with any other combination of tests for TTIs.

A total of **7,926** potential replacement donors were documented in the blood donor registers at the facilities and **4,917 (62%)** of these ended up donating. Facilities may have used different screening algorithms and potential donors may have been excluded on the basis of different criteria, including TTIs, blood group, haemoglobin concentration and/or clinical conditions. Testing for less prevalent TTs may have only been carried out for donors who passed the screening for more common conditions. In total, 74% of potential donors were tested for HIV, 71% for HepB, 74% for syphilis, 70% for malaria and 41% for HepC. Detailed data on outcomes of individual tests among all potential blood donors are presented in the Appendix.

8 Preventive Services

8.1 Post Exposure Prophylaxis (PEP)

A total of 4,329 persons received PEP during Q3 2020. This is a 27% increase from the previous quarter (3,402).

8.2 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 3 shows that **71,149 (16%)** of 442,409 women received Depo-Provera from ART clinics in Q3 2020. The Northern zone had achieved the highest coverage. Patient coverage has

slightly improved from last quarter (12%). 537 (71%) of 754 ART/PMTCT sites had stocks of Depo-Provera in October 2020. This is an increase from the 475 sites with stocks in July 2020.¹⁰ The HIV Program is no longer supplementing FP supplies through procurement and distribution of additional Depo-Provera to sites.

8.3 Cotrimoxazole Preventive Therapy (CPT)

All patients in HIV care are universally eligible for CPT in order to reduce the frequency and severity of several HIV-related diseases. Patients with confirmed HIV infection are provided lifelong CPT in 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 6 shows that **604,764 (71%)** of 852,425 patients on ART were on CPT. Coverage was highest in Central East zones at **79%**.

8.4 Isoniazid Preventive Therapy (IPT), Family Planning and BP Screening

ART patients with a negative screening outcome for TB symptoms in the 5 districts with the highest TB burden (Lilongwe, Blantyre, Chiradzulu, Thyolo, Zomba) were eligible for continuous IPT before the change of TPT policy. Currently the provision of IPT has also started in some districts amongst the newly initiated ART patients who have not completed the lifelong IPT.

Full transition to other districts for both IPT and 3HP is expected to happen from January 2021. **Table 3** shows that **89,967 (11%)** of the 852,425 ART patients in the 5 both the high burden and other districts and were on IPT by the end of Q3 2020. IPT coverage ranged from **1%** in Phalombe to **50%** in Likoma

664,039 (78%) of 852,425 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. **149,322 (22%)** of 664,039 were screened for hypertension at least once in 2020.

¹⁰ Many Mission hospitals do not provide family planning.

Table 3

Zone District	Patients on ART (all)					Women (18-49) on ART			Adults (30+) on ART		
	Total	On CPT		On IPT		Total	Given FP*		Total	BP screened**	
Malawi (National)	852,425	604,764	71%	89,967	11%	442,409	71,149	16%	664,039	149,322	22%
Northern Zone	84,588	66,771	79%	12,623	15%	43,901	8,973	20%	65,894	21,445	33%
Chitipa	6,826	4,524	66%	660	10%	3,543	440	12%	5,317	1,294	24%
Karonga	14,810	12,068	81%	181	1%	7,686	2,470	32%	11,537	1,556	13%
Nkhata Bay	10,828	9,250	85%	2,127	20%	5,620	1,497	27%	8,435	3,545	42%
Rumphi	8,469	6,728	79%	1,377	16%	4,395	353	8%	6,597	1,160	18%
Mzimba North	26,783	20,452	76%	6,171	23%	13,900	3,463	25%	20,864	10,156	49%
Mzimba South	16,080	12,957	81%	1,711	11%	8,346	504	6%	12,526	3,255	26%
Likoma	792	792	100%	396	50%	411	247	60%	617	480	78%
Central East Zone	66,945	52,280	78%	9,659	14%	34,744	4,755	14%	52,150	11,020	21%
Nkhotakota	13,013	10,431	80%	1,157	9%	6,754	376	6%	10,137	856	8%
Kasungu	18,159	14,128	78%	1,345	7%	9,425	644	7%	14,146	3,246	23%
Ntchisi	4,939	4,101	83%	668	14%	2,563	365	14%	3,847	1,596	41%
Dowa	13,430	9,582	71%	423	3%	6,970	876	13%	10,462	2,244	21%
Salima	17,404	14,039	81%	6,067	35%	9,033	2,494	28%	13,558	3,078	23%
Central West Zone	175,719	139,436	79%	20,066	11%	91,198	17,550	19%	136,885	45,140	33%
Lilongwe	110,142	86,325	78%	14,118	13%	57,164	12,241	21%	85,801	38,923	45%
Mchinji	17,664	13,233	75%	186	1%	9,168	1,746	19%	13,760	1,336	10%
Dedza	20,018	17,444	87%	4,307	22%	10,389	1,471	14%	15,594	1,440	9%
Ntcheu	27,895	22,434	80%	1,454	5%	14,478	2,091	14%	21,730	3,441	16%
South West Zone	266,977	178,168	67%	25,577	10%	138,561	19,365	14%	207,975	36,478	18%
Chiradzulu	41,604	25,897	62%	2,888	7%	21,592	4,469	21%	32,410	1,222	4%
Blantyre	99,026	53,415	54%	7,184	7%	51,394	5,761	11%	77,141	16,357	21%
Mwanza	6,586	4,199	64%	67	1%	3,418	149	4%	5,130	857	17%
Thyolo	56,946	43,161	76%	4,000	7%	29,555	3,037	10%	44,361	6,401	14%
Chikwawa	31,204	25,488	82%	8,094	26%	16,195	2,947	18%	24,308	2,790	11%
Nsanje	22,661	17,448	77%	2,364	10%	11,761	1,416	12%	17,653	2,443	14%
Neno	8,950	8,560	96%	980	11%	4,645	1,587	34%	6,972	6,409	92%
South East Zone	258,196	168,109	65%	22,042	9%	134,004	20,505	15%	201,135	35,239	18%
Mangochi	52,545	33,528	64%	6,812	13%	27,271	3,287	12%	40,933	7,376	18%
Machinga	31,203	19,679	63%	2,003	6%	16,194	3,452	21%	24,307	4,726	19%
Zomba	58,566	35,996	61%	4,920	8%	30,396	3,655	12%	45,623	9,961	22%
Mulanje	57,871	39,664	69%	4,425	8%	30,035	4,859	16%	45,082	7,649	17%
Phalombe	35,799	24,511	68%	455	1%	18,580	3,869	21%	27,887	1,457	5%
Balaka	22,212	14,731	66%	3,427	15%	11,528	1,383	12%	17,303	4,070	24%

* 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.

8.5 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.

840,383 (99%) of all patients retained on ART were screened for TB at their last visit before end of September 2020. Out of these, **3,374 (<1%)** patients were classified as new TB suspects. **2,191 (<1%)** patients were confirmed to have TB (clinical or lab based) and **2,150 (98%)** 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)	12,042	1%
ICF done	840,383	99%
TB not suspected	834,818	99%
TB suspected	3,374	0%
TB confirmed	2,191	0%
TB confirmed, not on treatment	41	2%
TB confirmed, on TB treatment	2,150	98%

8.6 HIV-Related Diseases

Table 4 shows the number of patients treated for key HIV-related indicator diseases. **3,623** patients were started on TB treatment this quarter and HIV status was ascertained for **3,588 (99%)**; **1,576 (44%)** of these were HIV positive and **1,475 (94%)** of all HIV positives were already on ART when starting TB treatment. In 3Q 2020, the patients that received Diflucan for acute cryptococcal meningitis and oesophageal candidiasis were not captured. **71** patients with Kaposi sarcoma were registered for ART in this quarter.

Table 4

Number new cases of key HIV-related diseases registered per quarter (KS = Kaposi Sarcoma, CM = cryptococcal meningitis, OC = oesophageal candidiasis).

	TB				KS *	CM *	OC *
	Tot. cases	HIV status asc.	HIV positive	Already on ART			
2019 Q4	3,886	3,858 99%	1,819 47%	1,659 91%	139	512	866
2020 Q1	2,471	2,400 97%	1,263 53%	1,229 97%	120	0	0
2020 Q2	3,471	3,162 91%	1,287 41%	1,170 91%	148	0	0
2020 Q3	3,623	3,588 99%	1,576 44%	1,475 94%	71	0	0

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

13,411 HIV exposed children were newly enrolled into follow-up during Q3 2020; **11,015 (82%)** of these were under the age of 2 months. The total number of new enrolments (11,810) exceeds by 2,184 (18%) the total number of known HIV exposed children discharged from maternity (9,626). 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 **10,309** infants in the **2-month age cohort**. **7,567 (73%)** had received a DNA-PCR result. **71 (1%)** of these were confirmed HIV infected. An additional **2** infants were diagnosed with *presumed severe HIV disease*, which means that a total of **73** infants were eligible for

ART. **67 (92%)** of these had started ART. Out of the entire 2-month age cohort, **8,928 (93%)** were retained in exposed child follow-up, **67 (1%)** had started ART and **38 (<1%)** were discharged confirmed uninfected.¹¹ **37 (<1%)** were known to have died and **479 (5%)** had been lost to follow-up.

There were **11,850** children in the **12-month age cohort**. Current HIV infection status was known for **9,019 (73%)** children (DNA-PCR or rapid antibody test) and **214 (2%)** of these were confirmed HIV infected. **5 (<1%)** additional children had been diagnosed with *presumed severe HIV disease*, which means that a total of 219 children were eligible for ART. **198 (90%)** had started ART. Out of the entire age cohort, **9,176 (84%)** were retained in exposed child follow-up, **198 (2%)** had started ART and **47 (<1%)** were discharged confirmed uninfected.¹¹ **1,415 (13%)** were lost to follow-up and **96 (1%)** were known to have died.

There were **11,850** children in the **24-month age cohort**. Current HIV infection status was known for **8,444 (71%)** children (DNA-PCR or rapid antibody test) and **188 (2%)** of these were confirmed HIV infected. **3** additional children had been diagnosed with *presumed severe HIV disease*, which means that a total of **191** children were eligible for ART. **189 (99%)** of these had started ART. Out of the entire age cohort, **8,593 (83%)** were retained in exposed child follow-up, **189 (2%)** had started ART and **58 (1%)** were discharged confirmed uninfected. **1,464 (14%)** were lost to follow-up and **108 (1%)** were known to have died.

Confirmed HIV-free survival at age 24 months in this quarter was **71%**. This was related to the fact that only **66%** in this cohort had a known HIV status. **4,222 (34%)** children were classified as '*current HIV infection status unknown*' and many of these may be among the **2,490** children lost to follow-up and the **116** children who had died. Only **276 (2%)** 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

¹¹ A small number of children may be rightfully discharged as 'confirmed uninfected' by 2 or 12 months of age, provided that HIV exposure through breast milk has definitely stopped (e.g. maternal death) and a negative HIV test was obtained at least 6 weeks thereafter.

inability to account for individual women's outcomes in the course of multiple visits. The cohort reporting system is designed to aggregate women's outcome data after they have completed their ANC visits. 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 of the known HIV infected women deliver at health facilities. ART coverage among known positives is therefore reliably calculated from maternity reports. Women admitted at maternity who are referred to another facility before / after delivery are double counted in aggregated maternity data. Assuming the probability of referral is independent of ART status, the number of women already on ART when getting pregnant is therefore **adjusted** by the overall proportion of referrals among women admitted to maternity.

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 10,700 HIV infected pregnant women in the population per quarter (1/4 of 42,802 in 2019).¹²

10.2 ARV Coverage among Pregnant / Breastfeeding Women and Exposed Infants

11,802 (>99%) of the estimated 10,364 HIV infected pregnant women in Malawi this quarter were on ART. This is based on **9,153¹³** women at maternity who were already on ART when getting pregnant and **2,649¹⁴** women who newly initiated ART in pregnancy. ART coverage was similar in the previous quarter (>99%).

An additional **672¹⁵** 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

¹² 2020 Spectrum model estimates for HIV infected pregnant women in 2020.

¹³ 9,153 women who started ART before pregnancy admitted at maternity; reduced by 6.2% to adjust for double counting of 9,178 referrals among 147,191 total admissions.

¹⁴ 3,197, women registered at ART clinics who were pregnant at the time of starting ART; a) 17.7% are discounted to adjust for double-counting of transfers based on 1,072 of 6,057 women who transferred within 12 months of registration (12-month Option B+ survival analysis); b) 17.1% are discounted to account for presumed failed ART initiations based on 949 of 5,535 women lost to follow-up within 6 months of registration (6-month Option B+ survival analysis).

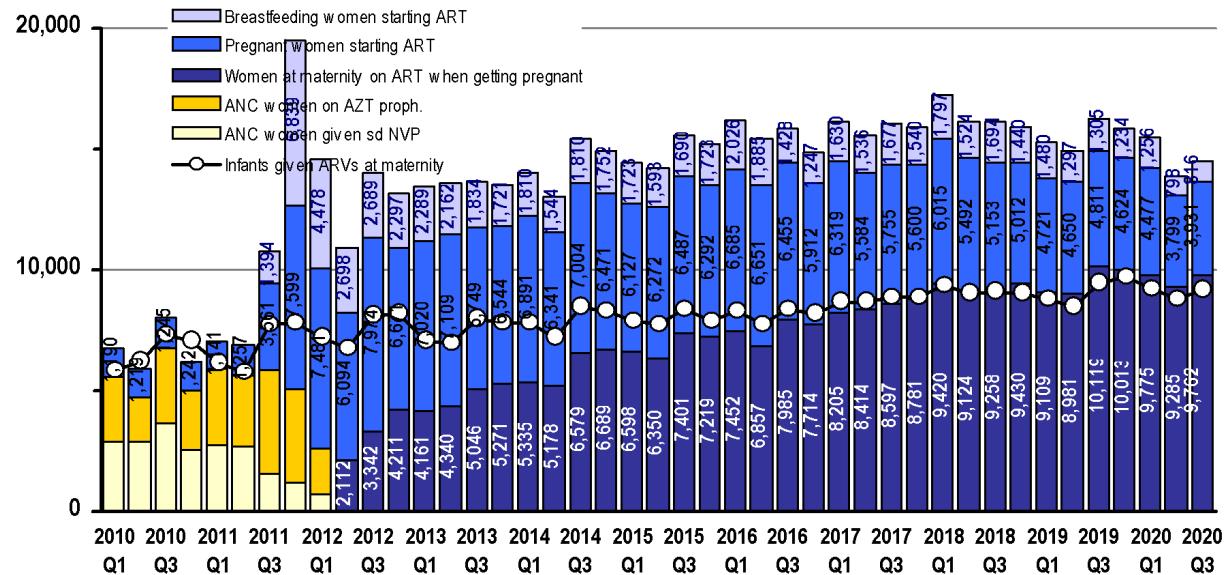
¹⁵ 817 women registered at ART clinics who were breastfeeding at the time of starting ART; reduced by 17.7% to adjust for double-counting of transfers based on 1,072 of 6,057 women who transferred within 12 months

to **3,321**. 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. **9,125 infants** were confirmed to have started NVP prophylaxis at maternity.

Figure 7 shows the transition from prophylactic ARV regimens for HIV infected mothers to universal ART under **Option B+** which has now been superseded by universal ART (registration data; not adjusted as above). 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 7

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



10.3 HIV Services at ANC

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

10.3.1 HIV Ascertainment and ART Coverage

Booking cohort:

158,254 women attended ANC for their first visit between July and September 2020. This exceeds the estimated 157,574 pregnant women in the 2020 population during one quarter.¹⁶ **155,128 (98%)** of women in this cohort had their HIV status ascertained at the first visit. Out of these, **9,530 (6%)** presented with a valid previous test result and **145,598 (94%)** received a new test. A total of **10,253 (7%)** of women were found HIV positive: **8,071 (79%)** of these from a documented previous test and **2,282 (21%)** from a new test. **10,274 (99%)** of all positives

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.

¹⁶ Estimated as ¼ of 630,187 births projected for 2020 (Demographic Projection from Spectrum 2020).

received ART: **8,012 (78%)** of these were already on ART when starting ANC; **2,018 (20%)** initiated ART at their first ANC visit and **244 (2%)** started late at 28 + weeks during pregnancy.

Outcome cohort:

171,076 women had started ANC between January and March 2020 and their outcomes were reported between July and September 2020.

168,887 (99%) of the outcome cohort had their HIV status ascertained at least once in the course of ANC. HIV ascertainment has remained consistently around 99% over the last quarters. **11,033 (7%)** presented with a valid documented previous HIV test result and **157,854 (93%)** received a new HIV test result at ANC. A total of **10,747 (6%)** women were found HIV positive. This is consistent with the latest Spectrum projections (6.6% HIV prevalence among pregnant women in 2020).¹²

10,667 (99%) of (known) HIV infected women were on ART by the end of ANC. This represents >99% coverage of the estimated 10,700 HIV positive pregnant women per quarter at the population level. Of the **10,667** ANC women who were known to receive ART **8,124 (76%)** were already on ART when starting ANC, **2,236 (21%)** initiated before 28 weeks of pregnancy and **307 (3%)** initiated during the last trimester of pregnancy. **10,618 (99%)** of HIV infected women at ANC were on Cotrimoxazole Preventive Therapy. **10,572 (98%)** of known HIV infected women attending ANC received the infant dose of ARVs (nevirapine syrup) to take home.

10.3.2 Syphilis Screening

143,801 (84%) of women in the outcome cohort were tested for syphilis and **3,430 (2%)** were syphilis positive. The syphilis testing rate has slightly decreased from the last quarter (88%). This higher testing rate is mainly driven by the increased availability of SD Bioline syphilis test kits at facilities. The proportion of positive syphilis test results has remained similar to the syphilis prevalence estimated from the 2010 ANC sentinel surveillance.

10.4 HIV Services at Maternity

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

Between July and September 2020, **146,266** women were admitted for delivery to maternity; **9,178** of these were referred to another facility before delivery, resulting in **137,088** total admissions to maternity.

A total of **140,370** babies were born, **135,946 (97%)** were singletons and **4,424 (3%)** were twins/multiples. There were **137,803 (98%)** live births and **2,567 (2%)** stillbirths. **136,800 (99%)** of babies born alive were discharged alive and **1,003 (1%)** died before discharge.

10.4.1 HIV Ascertainment at Maternity

138,044 (9%) women had their HIV status ascertained at maternity. Out of these, **10,276 (7%)** presented with a valid previous HIV test result and **127,768 (92%)** received a new test. A total of **10,190 (7%)** women were HIV positive and **9,924 (97%)** of these had been previously diagnosed while **266 (3%)** received a new positive result at maternity. The **138,044** women

whose HIV status was ascertained at maternity represent **93%** of the expected 154,750 women delivering in the population.

HIV exposure status was ascertained for **132,019 (97%)** out of **140,370** babies born and discharged alive. **9,125 (7%)** of these were born to a known HIV positive mother.

10.4.2 ARV Coverage at Maternity

A total of **10,149 (>99%)** of known HIV infected women admitted to maternity received ART. Out of these, **9,683 (95%)** had started ART before pregnancy, **256 (3%)** initiated ART during the 1st or 2nd trimester, **109 (1%)** initiated during the 3rd trimester and **101 (1%)** initiated ART at maternity.

A total of **9,125 (95%)** of **9,626** infants who were known HIV exposed and discharged alive started daily NVP prophylaxis at maternity. This represents **91%** coverage of the estimated 10,700 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 Q3 2020

By the end of September 2020, there were 754 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 **Figure 8**). 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 **19,384** initiated ART for the first time in Q3 2020. From 2019 Q1, routine reporting during supportive supervision has included a disaggregation of first-time initiations by sex and pregnancy status. In Q3 2020, **19,368 (>99%)** out of 19,384 first time initiations were disaggregated by sex and pregnancy.¹⁷ Among these, **39%** were males and **61%** were females. Total number of pregnant women amongst first time initiating females was **3,045 (26%)**.

The total number of patients newly initiated on ART represents **96%** of the 20,206 people recorded as newly diagnosed with HIV during the quarter. Among all new ART clinic registrations¹⁸ in Q3 2020, **38%** were males and **62%** were females. **3,934 (22%)** of the registered females were pregnant at the time of starting ART.

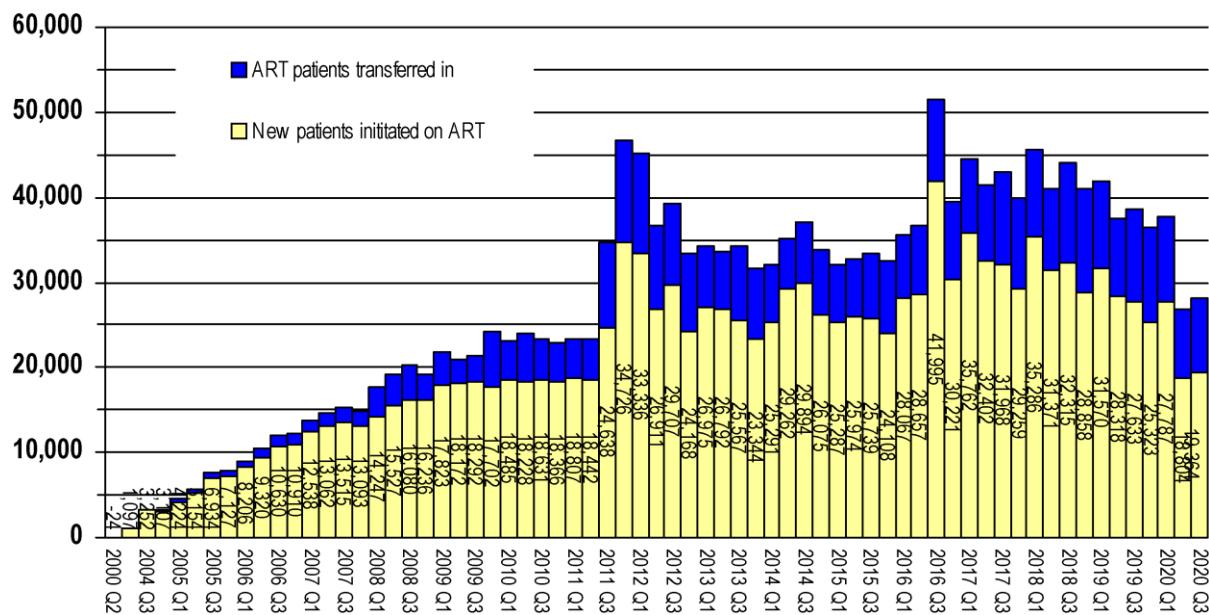
¹⁷ Manual sex and pregnant status disaggregation's for first time initiations for some high burden sites by supervisors was not possible because of the volume of work.

¹⁸ These proportions include the 18,804 patients newly initiating ART, but also 7,868 patients previously started on ART who transferred between sites and 261 patients who re-initiated ART after treatment interruption.

Figure 8

Patients newly initiated on ART and total ART clinic registrations per quarter

Total ART clinic registrations include patients who transferred between sites. This results in double counting of patients at the national level. For 'patients newly initiated on ART' every patient is only counted once.



A total of **25,148 (88%)** of all patients registered started in WHO stage 1 or 2 and **18,655 (78%)** of these started as 'asymptomatic' under universal ART eligibility policy. **2,473 (9%)** of patients registered started in WHO stage 3 and **569 (2%)** started in stage four. **46 (<1%)** had no documented clinical stage at initiation.

1,732 children were registered at ART sites in Q3 2020. **471 (27%)** of these were children aged 12-59 months in WHO stage 1 or 2. **20 (<1%)** infants started ART with presumed severe HIV disease. **97** 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 9,626 HIV exposed infants were identified at maternity and assuming a 2% transmission rate among the 99% of HIV positive mothers at maternity who received ART (and 20% transmission in the 1% who did not receive ART)¹⁹, only about 210 of these known HIV exposed infants may have been infected perinatally during Q3 2020. However, considering the projected 600 new infant HIV infections in the 2020 population per quarter²⁰, early infant treatment coverage remains low at an estimated **35%** ((210)/600). The most significant bottleneck for early infant treatment remains the identification of HIV (probably mostly recently) infected pregnant / breastfeeding women.

468 (2%) out of all ART clinic registrations were patients with TB: **260 (1%)** had a current and **208 (1%)** a recent history of TB. **71 (<1%)** of patients registered had Kaposi's sarcoma.

11.2 Cumulative ART Registrations up to September 2020

By the end of September 2020, there were a cumulative total of **1,841,246** ART clinic registrations, **1,452,459 (80%)** of whom were patients newly initiated on ART; **348,226 (19%)**

¹⁹ UNAIDS Reference Group on Estimates Modelling and Projections (2011). Working paper on mother-to-child-transmission rates for use in Spectrum. Geneva, UNAIDS.

²⁰ ¼ of the 2,400 estimated new infant infections in the population in 2020 (2020 Malawi Spectrum model)

were patients who transferred between clinics; **26,063 (1%)** re-initiated ART after treatment interruption.²¹ Out of all registrations, **37%** were males and **63%** were females, **92%** were adults and **8%** were children (<15 years).

11.3 ART Outcomes

852,425 patients were alive on ART by the end of September 2020. This is equivalent to **79% ART coverage** among the estimated 1,074,888 HIV positive population in Malawi in 2020 and it means that the revised national ART scale-up target²² for September 2020 (84% coverage) has been missed.

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 1,841,246 patients ever initiated on ART, **852,425 (46%)** were retained alive on ART, **129,230 (7%)** were known to have died, **406,697 (22%)** were lost to follow-up and **13,049 (<1%)** were known to have stopped ART.

An estimated **804,367** adults and **48,061** children (<15 years)²³ were alive on ART by the end of September 2020. This represents **84%** (48,061/ 57,317) and **79 %** (804,364/ 1,017,752) ART coverage among children and adults, respectively.

²¹ There has been an implausible drop of cumulative transfer-ins and re-initiations due to a large-scale reclassification of registration status at electronic medical record (EMR) sites. A new software version is being deployed that may change these numbers in the next quarter.

²² End of 2019 baseline and subsequent targets from the 2020-2025 National Strategic Plan for HIV.

²³ The total national number of ART patients with current age <15 years is extrapolated from the (6.0%) of all patients at EMR sites who were <15 years at the end of Q3 2020.

Figure 9: Patients alive on ART at the end of each quarter, stratified by size of facility (number of patients alive on ART)

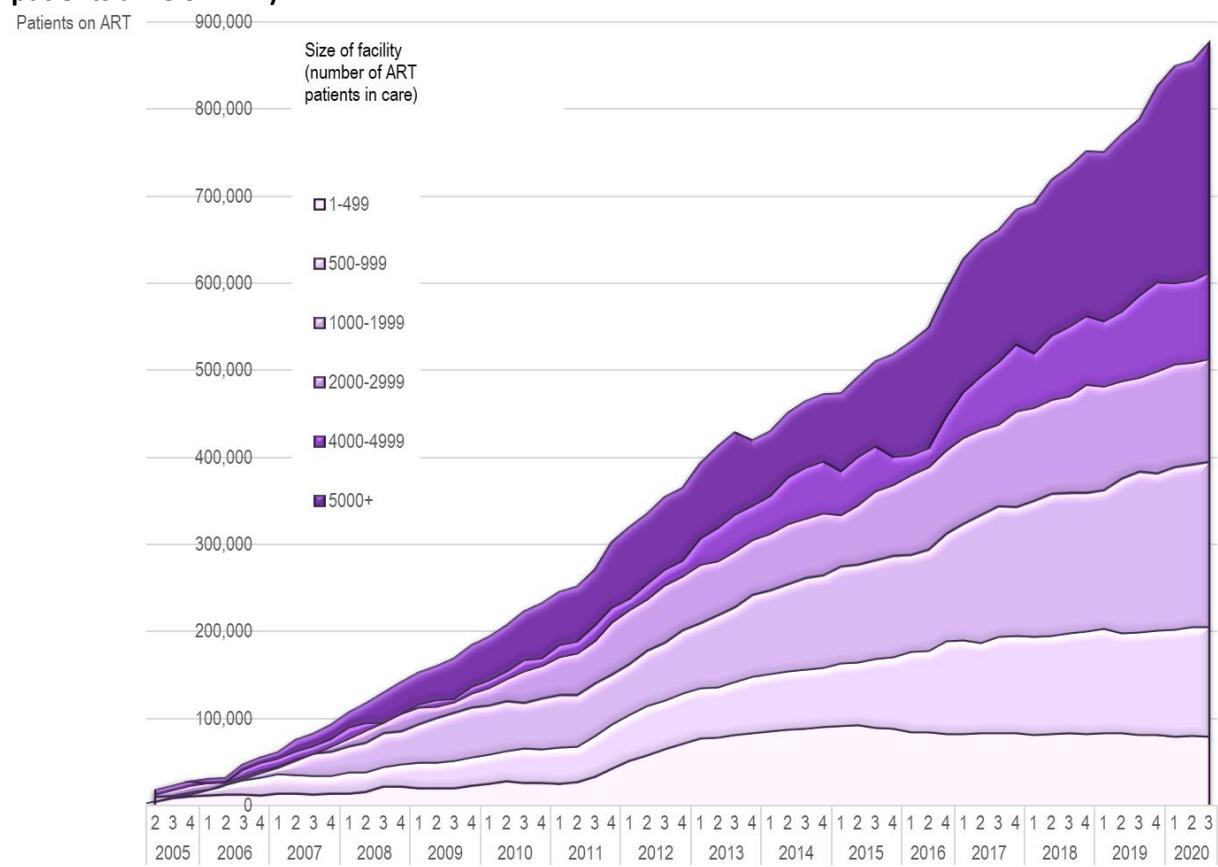


Figure 9 shows the increase of patients alive on ART by the end of each quarter, stratified by facility volume. The net increase of 6,325 patients alive on ART between July and September 2020 was slightly higher than last quarter (7,624). **Figure 9** also shows the decentralization of Malawi's ART program 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 September 2020, **43%** of the national ART patient cohort was in care at sites with fewer than 2,000 patients.

Figure 10
Quarterly rates of ART drop out (ART stop, defaulters and deaths)

Numerator: new ART stops, new defaulters and new deaths in the respective quarter

Denominator: total patients retained alive at the end of the previous quarter plus new patients registered in the respective quarter)

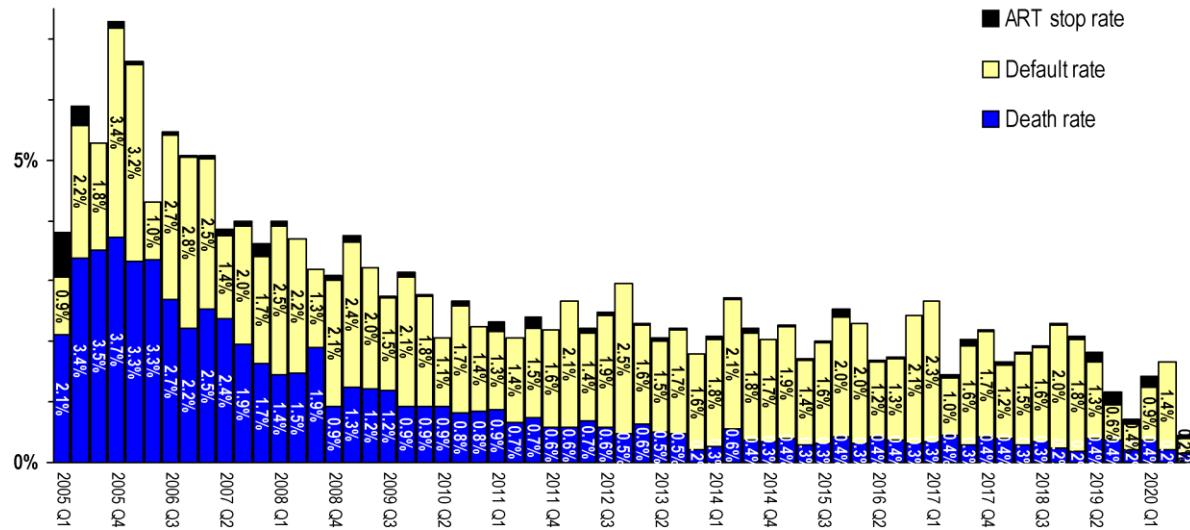


Figure 10 shows the considerable decrease of ART drop-out rates since the start of the national program, most of which was contributed by reduction in mortality. Quarterly defaulter rates appeared to have stabilized around 1.8% over the last 5 years, but the calculated attrition rates have fluctuated 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 a slight increase in the calculated defaulter rate (0.17%) from 0.55% in 2020 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 **1,678** new deaths, **1,924** new defaulters and **505** new confirmed stops in Q3 2020. This translates into a quarterly death rate of **0.15%** and a defaulter rate of **0.17%** among the patients alive and on treatment in this quarter. The stop rate has increased from 0.02 % in 2020 Q2 to 0.06% in 2020 Q3.

The usual analysis of early vs. late mortality trends was not possible this quarter due to implausible changes in reported death outcomes related to the distortions reported in 2019 Q4.

11.4 ART Cohort Survival Analysis

A 12 month ‘cohort outcome survival analysis’ was conducted for patients registered in Q3 of 2019, 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 2019. A further subgroup analysis was done for women who started ART under **Option B+** Q1 of 2020.

75% of adults and 79% of children were retained alive on ART after 12 months on treatment. 12-month retention rates were similar for adults (72%) and children (76%) 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.²⁴

6-month group cohort survival outcomes were known for **5,535** women registered as having started ART under Option B+ in Q1 2020. This is 85 (2%) fewer than the number of women registered under Option B+ in the quarterly cohort analysis in Q1 2020. This discrepancy is likely due to errors in data abstraction.²⁵ The 5,535 women in this cohort survival analysis include 686 (12%) women who transferred between sites. These transfers are double counted and discounted from the denominator (4,849) from the calculation of retention rates.

3,834 (79%) women in this cohort were retained at 6 months after registration. Of those not retained, **949 (93%)** were lost to follow-up, **36 (4%)** were known to have stopped ART and **30 (3%)** were known to have died.

12-month group cohort survival outcomes were known for **6,057** women registered as having started ART under Option B+ in Q3 2019. This is less by 28 (0.4%) the number of women registered under Option B+ in the quarterly cohort analysis in Q3 2019. This discrepancy is likely due to errors in data abstraction.²⁶ The **6,057** women in this cohort survival analysis include 1,072 (18%) women who transferred between sites. These transfers are double counted and discounted from the denominator (**4,985**) for the calculation of retention rates.

3,733 (75%) of women in this cohort were retained at 12 months after registration. **1,170 (93%)** of those not retained were lost to follow-up, **54 (4%)** were known to have stopped ART and **29 (2%)** were known to have died.

²⁴ 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

²⁵ 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.

²⁶ 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.

6 month survival OptionB+

Survival and retention in ART program

ART cohort registration group outcomes

Total ART clinic registrations	5,535	100%
Transfers out (double counted)	686	12%
Total not transferred out (patients in cohort)	4,849	88%
Total alive on ART	3,834	79%
Total not retained	1,015	21%
Defaulted	949	93%
Stopped ART	36	4%
Died	30	3%

12 month survival OptionB+

Survival and retention in ART program

ART cohort registration group outcomes

Total ART clinic registrations	6,057	100%
Transfers out (double counted)	1,072	18%
Total not transferred out (patients in cohort)	4,985	82%
Total alive on ART	3,733	75%
Total not retained	1,252	25%
Defaulted	1,170	93%
Stopped ART	53	4%
Died	29	2%

11.4.1 Secondary outcomes of patients retained on ART

846,110 patients who were alive on ART and remained registered at their facilities have documented secondary outcomes.

ART Regimens

825,529 (97%) of patients were on first line regimens. In line with the planned transition of patients from PI-based to DTG-based second line, the number of patients on PI-based 2nd line ART decreased by 6,840 from 30,917 in the previous quarter, reaching **24,077 (3%)** by the end of Q3 2020. **2,819 (<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 first line regimens, **9,431 (1%)** were on paediatric formulations. Most of these had transitioned from the previous standard first line for children (**2,723 (29%)** on regimen 2P: AZT/3TC/NVP) to **6,238 (66%)** (regimen 15P: ABC/3TC+DTG). Most adult patients on 1st line ART had transitioned from regimen **5A** (tenofovir / lamivudine / efavirenz) **15,952 (2%)** to the new standard first line regimen **13A (tenofovir / lamivudine / dolutegravir) 782,340 (96%)**.

Adherence to ART

Completeness of adherence reporting has remained very high: **816,353 (96%)** 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. **584,698 (72%)** 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 and caused by a known error in one version of the point of care EMR system that was in use at many sites this quarter.

ART Side Effects

828,981 (97%) patients on ART had information on drug side effects documented at their last clinic visit before end of September 2020. **7,887 (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 appears to decline further following the recent transition to DTG-based regimens.

11.4.2 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.

11.4.3 Facility data from VL Sample Logbooks and High VL Registers

163,361 VL samples were drawn in the reporting period and documented in the facility sample logbook. **147,469 (90%)** of these were for routine/scheduled VL monitoring; **13,665 (8%)** were extraschedular and **2,227 (1%)** were replacements of lost samples. **23%** of the extraschedular samples were targeted (suspected treatment failure) and **81%** 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

154,732 samples were drawn by facilities between January and March 2020 and outcomes were documented for **all** of these samples. **17,739 (23%)** results were received at the facility within 4 weeks of sample collection; **28%** were received between 5-8 weeks and **21%** between 9-12 weeks. The remaining **28%** were received after 12 weeks or were still missing. **11%** of patients were notified of their result within 4 weeks of sample collection, **13%** were notified within 5-8 weeks and **15%** within 9-12 weeks. **93,161 (60%)** of 154,732 were either notified after 12 weeks or the notification was still pending. **97%** of the results were printed in the lab and delivered at the facility and **3%** were electronically transmitted.

135,016 (87%) of samples produced valid VL test results. **1,058 (1%)** samples were rejected, or the results were invalid and **18,658 (12%)** of samples had outstanding or missing results. **123,475 (91%)** results were suppressed below 1000 copies/ml and **11,559 (9%)** were high (≥ 1000 copies/ml).

Outcomes from High VL Registers

Between July and September 2020, **15,936** high VL results (≥ 1000 copies/ml) were received at facilities and entered in the High VL Registers. **14,303 (90%)** of these were from routine

monitoring samples, **1,217 (8%)** from targeted samples and **416 (3%)** from repeat samples. **9,570 (60%)** patients had completed intensive adherence support by September 2020 and follow-up samples were drawn for **6,514 (41%)**. Valid results were recorded for **4,677 (72%)** of follow-up samples and **73%** of these were re-suppressed (<1000 copies/ml).

A final treatment decision was available for **4,466** high VL patients. **3,797 (85%)** were maintained on the current regimen, **655 (15%)** were switched to second line and **14 (<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.

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

The number of VL results produced decreased from 116,061 in Q2 to **120,902 in Q3** 2020. 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.

120,902 VL results were dispatched from the labs to 662 sites between July and September 2020. 72 sites accounted for half of all results released this quarter.

18,720, (15%) of 102,720 samples processed were plasma and **102,178 (85%)** were DBS.

Lab	Samples Processed			Turn-around Time (Days) [§]
	Plasma	DBS	Total	
DREAM Blantyre	177	9,301	9,478	29
DREAM Balaka	607	11,781	12,388	35
Kamuzu CH	5,444	9,116	14,560	42
Mzimba DH	0	4,999	4,999	25
Mzuzu CH	0	6,600	6,600	21
Nsanje DH	0	10,012	10,012	33
Partners in Hope	2,391	12,464	14,855	35
QECH	4,052	11,446	15,498	26
Thyolo DH	0	9,450	9,450	15
Zomba CH	6,049	17,013	23,062	36
Total	18,720	102,187	120,902	31

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

Kamuzu CH, Queen Elizabeth CH, Zomba CH and Partners in Hope labs produced 56 % of all VL results. The median interval between sample collection and printing of results was **31 days** at the national level, ranging from **15 days** at Thyolo DH to **42 days** at Kamuzu CH. The most significant delays occurred between sample receipt and process run in the lab (median 67 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.

Reason	0-999	1000+		Total
Routine	90,937	94%	5,467	6% 96,404
Targeted	20,316	88%	2,745	12% 23,106
Other/unk	1,164	84%	228	16% 1,392
Total	112,462	92%	8,440	8% 120,902

96,404 (78%) of VL results released this quarter were classified as *routine scheduled*²⁷. This is 46% of the estimated 211,527 ART patients passing a VL monitoring milestone this quarter. **23,106 (19%)** of samples were classified as *targeted (suspected treatment failure / repeat)* and for **1,392 (1%)** the reason for the sample was ‘other’ or not specified. **94% (90,937)** of patients with a routine viral load result this quarter achieved viral suppression (i.e. <1,000 copies/ml). This mean the target for the “3rd 95” was missed by a small margin.

Viral suppression rates were significantly lower for routine samples among children (0-9 yrs: **70%**) 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 **93%, 95% and 96%**, respectively. 90% of routine VL samples were from adults 20+ years. Patient age was not recorded for 2,405 (2%) of routine samples.

The **23,106** targeted VL results this quarter exceed the 5,198 routine VL results ≥1000 copies/ml from the previous quarter by a factor of four. 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 5,117 samples were marked as *confirmatory (follow-up)* and 614 as *targeted (treatment failure suspected)* on the lab request form. 17,375 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 6,840 patients on 2nd line ART²⁸ this quarter and surpass the 5,198 routine VL results ≥1000 copies/ml from the previous quarter by 24%. The facility VL registers were designed to facilitate tracking of samples and results and to improve appropriate follow-up action on high VL results.

The time on ART was entered for 64,422 (67%) of 96,404 routine samples registered on the LIMS and only **16,516 (26%)** 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 **92%, 93%, 96%, 96% and 96%** at 6, 24, 72, 96 and 120 months on ART respectively. Viral suppression rates of samples drawn on schedule were similar to those of ‘catch-up’ (extra-schedular) samples and samples with unknown timing both at 94%.

²⁷ 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.

²⁸ 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.

11.5 TB / HIV Management

3,588 (99%) of 3,623 new TB patients had their HIV status ascertained this quarter and **1,567 (44%)** of these were HIV positive. **1,475 (94%)** 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 720 out of 962 facilities offering STI management according to the *2018-19 Malawi Harmonized Health Facility Assessment (HHFA)*²⁹ 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 **97,981** STI cases were treated in Q3 2020. Considering the 74% site-level completeness of reporting, this number is estimated to represent a total of **132,406** STI cases treated. This is equivalent to **55%** of the estimated quarterly 241,725 STI cases in the population (extrapolation from 2015/16 MDHS) ³⁰.

Out of **97,981** documented clients treated, **40,514 (41%)** were male and **57,467 (59%)** were female. **67,502 (15%)** of female STI clients were pregnant. **12,406 (31%)** of male STI clients were circumcised. **67,502 (69%)** clients were 25 years and above, **22,752 (23%)** were 20-24 years and **7,727 (8%)** were under 20 years old.

12.2 Client Type and STI History

86,756 (89%) of clients were symptomatic and **11,225 (11%)** were asymptomatic (treated as partners). Among symptomatic clients, **79,849 (92%)** were index cases and **6,907 (8%)** were partners. A total of **23,433** partner notification slips were issued, equivalent to an average of 0.29 slips per index case. Considering the 23,433 partner notification slips issued, **81% (18,132)** of those notified presented to the clinic. **72,843 (74%)** of clients presented with their first lifetime episode of STI, **19,237 (75%)** clients out of 25,138 with previously treated STIs were reported to have had an STI more than 3 months ago and **5,901 (23%)** 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.

²⁹ Ministry of Health (2019). Malawi Harmonized Health Facility Assessment 2018-20 Preliminary Report

³⁰ According to the 2015/16 MDHS, 14.7% of women (15-49 years) and 9.6% of men (15-64 years) reported STI symptoms in the past 12 months. A total of 966,900 annual STI cases are estimated by applying these proportions to the 9.3 million men and 3.9 million women in these age groups in the 2016 population (NSO projections). Quarterly STI cases are assumed as ¼ of the estimated annual cases in the population.

12.3 HIV Status

HIV status was ascertained for **88,513 (90%)** clients and **16,159 (18%)** of these were HIV positive. **2,037 (13%)** of positives were identified through a new test initiated at the STI clinic, while **14,122 (87%)** presented with a documented previous positive HIV test result. **13,279 (94%)** 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. **40,212 (49%)** of the 81,822 STI clients with unknown or new negative test result were referred for repeat HTS. **4,279** patients were reported as “referred for ART”. This exceeds the sum of new positives (2,037) and previous positives not on ART (843) 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. 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 **30,035 (39%)** cases, followed by urethral discharge (UD, **28,473** cases), genital ulcers (GUD, **12,308** cases) and lower abdominal pain (LAP, **12,814** cases). Serologically confirmed syphilis accounted for 11% of the cases. Scrotal swelling, bubo and genital warts each accounted for 1% of cases.

13 Supply Chain Management of HIV Program Commodities

13.1 Quantification and procurement planning

The routine quarterly quantification review was based on Q3 2020 ART cohort analysis and physical site level stock data collected during the October 2020 supervision visits. This review informed the quantification of ARVs and test kits and the submission of new orders through Pooled Procurement Mechanism (PPM). The program has also continued to provide quarterly supply planning updates to the Procurement Services Agents (PSA).

Malawi has made significant progress with the planned transition to dolutegravir-based first and second line regimens, which started in January 2019. 787,794 (92%) of 852,425 total patients alive on ART Q2, are on Dolutegravir based regimen representing **92%** of patients alive on ART.

The Department for HIV and AIDS received ARVs and OIs medicine worth **28,720,558 USD** from July to September 2020 through I-PLUS Solutions.

13.2 Quarterly supply chain support during Q2 integrated supervision

Supply chain and logistics officers from district and central level provided stock management visited 762 sites during the Q3 2020 integrated HIV program site supervision. This included a physical inventory at all sites and ad-hoc mentoring in stock management at health facilities with poor performance. There was a further overall improvement in site-level stock management for HIV commodities. The supply chain team monitored logistics tools documentation including use of Daily Activity Registers and completion of stock cards.

Table 5 shows the total stocks found at the sites and in the central warehouse, and the estimated consumption rates for all commodities.

13.3 Availability of standard first line ARVs

Adequate stock levels of TLD in packs of 30 and 90 tablets were maintained at over 760 sites during this period, with an appropriate ratio of 1,286,646 packs of 30's and 362,928 packs of 90's. This has enabled sites transition patients eligible for 6-month dispensing with no stock out risk in country.

The stock report analysis showed 17.4 months of stock for tenofovir/lamivudine/efavirenz 300/300/600mg (TLE) during supervision and 1.3 months of stock at warehouse.

13.4 Bimonthly distribution of HIV & Malaria Commodities

Two scheduled bimonthly distribution round of HIV & Malaria commodities including laboratory items and cervical cancer equipment (Distribution Rounds 54, 55 and 56) took place during Q3 2020.

During Q3 2020, the logistics team at the Department of HIV and AIDS coordinated **4,183 individual commodity transactions** between ART sites to mitigate stock imbalances (65% ARVs; 20% Test kits; 13% 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 are able to 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.

Table 5

Total stocks of HIV program commodities at all sites visited during the 2020 Q3 supportive site supervision. Stock positions are from the date of the visit (between 1-4 weeks after the end of the quarter). Warehouse stock positions are from 30/11/2020

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)	687	344,056	544,393	52,533	6.5	10.4
	ABC / 3TC 600 / 300mg tins (30 tabs)	723	95,490	93,034	13,346	7.2	7.0
	ATV / r 300 / 100mg tins (30 tabs)	505	21,197	71,674	11,482	1.8	6.2
	AZT / 3TC / NVP 300 / 150 / 200mg tins (60 tabs)	519	127,894		1,381	92.6	
	AZT / 3TC / NVP 60 / 30 / 50mg tins (60 tabs)	630	236,201	12,652	6,808	34.7	1.9
	AZT / 3TC 300 / 150mg tins (60 tabs)	639	27,216	46,848	13,765	2.0	3.4
	AZT / 3TC 60 / 30mg tins (60 tabs)	448	8,656	19,030	750	11.5	25.4
	DRV 600mg tins (60 tabs)	21	1,631	3,844	0	0.0	0.0
	DTG 50mg tins (30 tabs)	704	203,095	244,977	21,901	9.3	11.2
	EFV 200mg tins (90 tabs)	144	1,925	765	72	26.7	10.6
	EFV 600mg tins (30 tabs)	310	12,696	7,667	354	35.9	21.7
	LPV / r 100 / 25mg tins (60 tabs)	625	87,188	53,059	18,200	4.8	2.9
	LPV / r 200 / 50mg tins (120 tabs)	408	14,654	18,135	985	14.9	18.4
	LPV / r 40 / 10mg tins (120 granules)	666	49,498	107,327	6,128	8.1	17.5
	LPV / r 40 / 10mg tins (120 pellets)	11	441		0	0.0	0.0
	NVP 200mg tins (60 tabs)	444	29,998		481	62.4	
	NVP 50mg tins (60 tabs)	92	3,990		198	20.2	
	r 100mg tins (60 tabs)	21	1,207	191	148	8.2	1.3
	r 25mg tins (30 tabs)	502	11,997	26,476	1,155	10.4	22.9
	RAL 25mg tins (60 tabs)	38	1,680	829	0	0.0	0.0
	RAL 400mg tins (60 tabs)	0	0		0	0.0	0.0
	TDF / 3TC / DTG 300 / 300 / 50mg tins (30 tabs)	745	1,057,217	1,168,675	156,468	6.8	7.5
	TDF / 3TC / DTG 300 / 300 / 50mg tins (90 tabs)	750	851,048	1,124,819	208,619	4.1	5.4
	TDF / 3TC / EFV 300 / 300 / 600mg tins (30 tabs)	679	278,912	21,338	15,952	17.5	1.3
	TDF / 3TC 300 / 300mg tins (30 tabs)	693	75,567	83,368	5,529	13.7	15.1
bottles	Fluconazole (generic) 50mg / 5ml bottles (35 ml)	9	188				
	NVP 50mg/5ml bottles (100 ml)	581	31,878				
vials	Amphotericin B Liposomal 50mg vials (10 each)	40	4,673	3,430			
	Benzathine Penicillin 144g vials (50 each)	418	59,537	201,500	15,405	3.9	13.1
	Bleomycine 15,000IU vials (1 each)	39	7,760	29,711	0	0.0	0.0
	Ceftriaxone 1g vials (10 each)	363	274,975		160,024	1.7	
	Depo-Provera 150mg/1ml vials (25 each)	537	878,120		76,718	11.4	
	Fluconazole (Diflucan) 2mg / 1 ml vials (10 ml)	45	20,624	10,006	0	0.0	0.0
	Gentamicin 80mg / 2ml vials (50 each)	596	799,197		63,440	12.6	
	Paclitaxel 6mg/ml vials (1 each)	14	2,524	10,374	0	0.0	0.0
	Streptomycin 1 g vials (50 each)	14	10,265				
	Vincristine 1mg / 1ml vials (1 each)	33	5,964	5,070	0	0.0	0.0
tabs	Aciclovir 200mg blister packs (500 tabs)	11	95,886		964,620	0.1	
	Aciclovir 200mg tins (100 tabs)	308	905,937	14,773,500	0	0.0	0.0
	Azithromycin 500mg blister packs (3 tabs)	145	16,609	28,173	4,078	4.1	6.9
	Ciprofloxacin 500mg blister packs (100 tabs)	234	520,312	2,783,400	61,734	8.4	45.1
	Clotrimazole 500mg boxes (1 each)	263	257,195	107,340	9,350	27.5	11.5
	Codeine 30mg tins (100 tabs)	23	1,326,603		0	0.0	0.0
	Cotrimoxazole 100 / 20mg blister packs (1000 tabs)	648	87,913,345	241,455,000	19,002,429	4.6	12.7
	Cotrimoxazole 400 / 80mg tins (1000 tabs)	568	21,049,383		25,296,991	0.8	
	Cotrimoxazole 960mg blister packs (1000 tabs)	728	73,558,424	55,613,000	25,061,295	2.9	2.2
	Doxycycline 100mg blister packs (500 tabs)	182	797,886	3,128,500	0	0.0	0.0
	Doxycycline 100mg tins (1000 tabs)	318	2,015,000	1,507	355,855	5.7	0.0

Inventory unit	Item	Sites with any Stock	Total Physical Stock		Consumption/ Month	Months of Stock *	
			At Sites	In Warehouse		At Sites	Wareh.
	E thambutol (E) 100 mg blister packs (100 tabs)	23	11,039				
	E thambutol (E) 400 mg blister packs (672 tabs)	21	28,730				
	Erythromycin 250mg tins (100 tabs)	21	41,720	2,748,300			
	Erythromycin 250mg tins (1000 tabs)	71	392,871	359,000	0	0.0	0.0
	Fluconazole (Diflucan) 200mg blister packs (100 ca	100	222,208	1,892,600			
	Fluconazole (Diflucan) 200mg tins (28 tabs)	120	405,797		0	0.0	0.0
	Flucytosine 500mg blister packs (100 tabs)	35	13,124	146,000			
	Ibuprofen 200mg tins (100 tabs)	195	2,210,300		1,293,096	1.7	
	Isoniazid (H) 100mg blister packs (100 tabs)	352	2,419,535		0	0.0	0.0
	Isoniazid (H) 300mg blister packs (672 tabs)	662	24,425,042	49,748,832	18,844,509	1.3	2.6
	Isoniazid (H) 300mg tins (1000 tabs)	13	202,766		0	0.0	0.0
	Metronidazole 200mg tins (1000 tabs)	522	14,079,005	26,480,000	0	0.0	0.0
	Morphine 10mg blister packs (60 tabs)	46	362,875		329,528	1.1	
	Morphine 30mg blister packs (30 tabs)	25	74,613	150,660	0	0.0	0.0
	Pyridoxine 25mg tins (100 tabs)	589	11,966,712	79,348,500	18,844,509	0.6	4.2
	RH 150 / 75 mg blister packs (672 tabs)	375	2,112,906				
	RH 75/50mg blister packs (84 tabs)	161	272,667				
	RHZ 75/50/150mg blister packs (84 tabs)	176	164,611				
	RHZE 150/75/400/275mg blister packs (672 tabs)	363	1,328,336				
	Rifapentine 150mg tins (24 tabs)	132	173,369	807,936			
sheets	ART pat. card adult (yellow) Ver8 bundles (50 she	82	25,094		55,832	0.4	
	ART pat. card paed. (blue) Ver 8 bundles (50 she	34	3,455				
	Exposed child card (pink) Ver2 bundles (50 sheet	470	63,152	123,150	4,457	14.2	27.6
	Family HTC Referral Slip bundles (100 sheets)	415	237,852				
	Polythene sleeve bundles (100 sheets)	55	18,454		13,854	1.3	
	STI Partner Referral Slip bundles (100 sheets)	105	51,122				
tests	Cryptococcal antigen CrAg bundles (50 each)	100	31,296	80,300	0	0.0	0.0
	DBS kit (filter paper, lancet, etc.) 70ul boxes (50 t	705	318,274	671,400	90,592	3.5	7.4
	Determine HIV1/2 boxes (100 each)	678	1,188,020	1,476,900	192,853	6.2	7.7
	Determine TB LAM Ag bundles (100 each)	25	8,681	49,300	0	0.0	0.0
	OraQuick HIV Self-test bundles (25 each)	588	512,034	57,875	108,030	4.7	0.5
	SD Bioline Syphilis boxes (30 each)	647	197,369	262,110	56,986	3.5	4.6
	Uni-Gold HIV1/2 boxes (20 each)	650	93,881	251,020	19,488	4.8	12.9
pieces	Condoms female boxes (1000 each)	481	519,045				
	Condoms male boxes (144 each)	684	30,492,005	45,592,992	6,504,050	4.7	7.0

* '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 Training and Mentoring

In compliance with Covid-19 guidelines, a lot of planned trainings were suspended and only a few critical ones were conducted as reported below:

14.1 ART/PMTCT

90 Nurses and clinicians were trained and certified for the first time in the Integrated ART/PMTCT/TB guidelines.

14.2 HIV Testing Services

50 testing providers were trained in HIV self-testing and **19** were oriented in the Index testing.

14.3 PrE-Exposure Prophylaxis

20 Nurses and Clinicians were trained in Trainer of Trainers (ToT) for the provision of Pre-Exposure Prophylaxis (PrEP)

15 Participants in the Q3 2020 Supervision (12-23 October 2020)

Richard Abudul (CO, MOH)	Samson Chitsulo (, other)	William Kaunda (, Salima)
Sophie Bakali (, other)	Willie Chiumbuzo (, MoH)	Kondwani Kautsa (, MOH)
Charles Banda (, MoH)	Madalitso Chiundira (, MoH)	Jean Kayamba (Nurse, MOH)
Henry Mponde Banda (, moh)	Stuart Chuka (CO, MBCA)	Innocent Kazembe (, MOH)
Little Banda (, MOH)	Ruth Deula (, moh)	Daniel Kazingatchire (, MOH)
Lucy Banda (, MOH)	Mcdonald Domingo (, MOH)	Robert Khombe (, MOH)
Osman Banda (, MOH)	Peter Donda (CO, Dedza DH)	Ethel Khumbanyiwa (, moh)
Wells Banda (CO, MOH)	Lackson Gama (, MoH)	Andy Kishombe (, MoH)
Robert Beston (, MOH)	Lackson Gawani (, MoH)	Andy Kisombe (, MOH)
Thomas Biseck (, MOH)	Richard George (, MOH)	Hope Kumwenda (, MoH)
Annie Biza (, moh)	Sidrick Golden (, MOH)	Tolani Kumwenda (, moh)
Regina Bwanali (, MOH)	Symon Goliath (, Dignitas)	Erasto Kuntha (, cham)
James Chadza (, MOH)	Bertha Gombeza (, MOH)	George Lipande (CO, MOH)
Demobry Chagomerana (, MoH)	Grant Gondwe (, NTP)	Jesse Lobeni (Nurse, MOH)
Ephraim Chale (, MoH)	Paul Gondwe (, MOH)	Patricia Ludaka (, MoH)
Lincy Chalunda (CO, MOH)	Yananga Gondwe (, MoH)	Samuel Lunda (, MoH)
Walter Chambwe (, moh)	Sidder Hambisa (ENM, MOH)	Malumbo Luwinga (Logistics, Kamuzu Central)
Rachel Champiti (, MOH)	Natasha Harawa (, MoH)	Diana Lwesha (, MoH)
Jailos Chaula (, other)	Chikondi Harrison (, Logistics)	Rose Mabviko (, MOH)
Ronard Chawinga (nurse, MOH)	Louis Hawonga (, MOH)	Martha Madani (Nurse, MOH)
Joseph Chigoli (Nurse, MOH)	Anderson Jeke (, Balaka DHO)	Chikayiko Majamanda (Nurse, MOH)
Maggie Chigona (, MoH)	Joe Jumbe (, MoH)	Mercy Makaika (Nurse, MOH)
Magret Chigona (CO, MOH)	Francis Kachali (, MoH)	Linda Makata (, MOH)
Margaret Chigona (CO, Blantyre DHO)	Lilian Kachali (Nurse, MOH)	Geoffrey Makhalira (, NTP)
Patrick Chikafa (, Lilongwe DHO)	Arlene Kachapira (, MoH)	Mwai Makina (, MOH)
Grace Chikhwaya (, MOH)	Ruth Kachitsa (, MoH)	Chifundo Makuluni (Nurse, MOH)
Kondwani Chikoti (CO, MOH)	Vera Kajawa (Nurse, MOH)	Nita Makumba (, moh)
Patrick Chikuni (, MoH)	Patrick Kaliza (, MOH)	Felix Mala (, MOH)
Lusayo Chikuta (, Nkhatabay)	Jonathan Kalua (, MoH)	Lusayo Malanga (, MoH)
Verydear Chilapondwa (, MOH)	Richard Kamalizeni (, MOH)	Grey Malata (, MOH)
George Chimadzuma (, MoH)	Ever Blessings Kamanga (, MoH)	Thokozani Malimelo (, MoH)
Harrison Chimbaka (, MOH)	Kepson Kamanga (MA, MOH)	`symon Manda (, MOH)
Peter Chimphero (CO, MOH)	Emmanuel Kampaliro (, MOH)	Simion Manda (, MOH)
Matthews Chimtenga (, Lighthouse)	Gift Kamphika (MA, MOH)	Joe Manje (, MOH)
Diana Chinansi (, MOH)	Thokozani Kamvamgombo (, MoH)	Cecilia Manyawa (Nurse, MOH)
Catherine Chinoko (, MoH)	Jacqueline Kamwana (, MoH)	Davie Maseko (CO, SOS)
Yunus Chiosa (, NTP)	Annie Kanyemba (Nurse, MOH)	Wongani Maseko (, MOH)
Diana Chipande (, MOH)	Saulosi Kanyinji (, MoH)	Tobias Masina (, MoH)
Grace Chipanga (Nurse, Private)	Justice Kaphiri (, NTP)	Innocent Masuli (, Lighthouse)
Clement Chiphota (CO, MoH)	Elisa Kapundi (NMT, MOH)	Angela Masumba (, moh)
Elvin Chipoya (, MOH)	Annie Kaseka (RNM, MOH)	Yamikani Matiya (, MoH)
Esnart Chirambo (, MoH)	Fedelis Kasiya (, MOH)	Hannock Matupi (ARV clinician, MOH, Rumphi DH)
Thom Chirwa (, MOH)	Catherine Kassam (, MOH)	Martin Maulidi (CO, I-TECH)
	Rodrick Kaulere (CO, CHAM (Sister Tereza))	Rose Maviko (Nurse, Limbe HC)
	Absalom Kaunda (CO, MOH, Mzimba DHO)	

Faith Upile Mawaya (, Private)	Johnbosco Mwafilaso (Clerk, MOH)	Mike Nyirenda (CO, Lighthouse)
Yanjanani Mawindo (, MoH)	Thomas Mwale (, MOH)	Veronica Nyirenda (, moh)
Felix Mbalale (CO, MOH)	Harold Mwareya (, MOH)	Mcjones Nyirongo (, MOH)
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Kingsley Mbewa (CO, MOH)	Riff Mzava (Nurse, MOH)	Chrissy Padoko (, MOH)
Brenda Mbewe (, MoH)	Peter Mzumala (, Mzimba North)	Kondwani Phiri (, MOH)
Alice Mdolo (, MOH)	Peter Mzumara (ART clinician, MOH)	Patrick Phiri (, MOH)
Topcy Mdolo (, MOH)	Fred Namalima (MA, MOH)	Precious Phiri (, MoH)
Sunshine Mfungwe (, Lighthouse)	Francis Nangantani (, moh)	Tifera Phiri (, MOH)
Dalitso Midian (, moh)	Pepsy Nangwale (Nurse, MOH)	Zuze Phiri (, MoH)
Alex Mission (, MOH)	Overton Ndhlovu (, MOH)	Stanley Phombo (Nurse, MOH)
Joel Mkandawire (, MoH)	Joel Ng'ambi (MA, MOH)	Enock Phwitiko (, MoH)
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Merium Mkangala (, moh)	Youngson Ngonya (, MoH)	Shadreck Puruma (, MOH)
Chimwemwe Mlenga (, MOH)	Etta Ngulube (, MoH)	Beston Robert (, MOH)
Daniel Mlongoti (, moh)	Charles Ngwira (, MoH)	Alice Sajeni (, moh)
Christopher Mlotha (, MoH)	Eunice Ngwira (, MOH)	Dorica Sambo (Nurse, MOH)
Yvonne Mnjeza (, MOH)	Jephter Ngwira (, MoH)	Limbitso Sengani (, moh)
Tryness Mponda (NMT, MOH)	Envance Njaidi (MA, MOH)	Limbitso Senganimalunj (, moh)
Alice Mponya (, Lighthouse)	Dumbo Njera (, MOH)	Gabriel Simwanza (MA, MOH)
Edwin Msiska (, MOH)	Merium Nkangala (, moh)	Aleka Simwela (, MOH)
Chawanangwa Msonda (, MOH)	Franklin Nkhambule (, MOH)	Juliana Soko (ARV nurse, MOH, Livingstonia MH)
Catherine Flora Msukwa (, MoH)	Grace Nkhata (Clerk, MOH)	Ethel Susuwele (MA, MOH)
Sosten Mtalika (, Dedza)	Grace Juma Nkhata (Nurse, MOH)	Mark Suzumire (CO, MOH)
Egnatius Mtambalika (, DTO)	Angela Nkhoma (Nurse, MOH)	Andrea Tembo (Nurse, Dignitas)
Temweka Mtenje (, MoH)	Joe Nkhonjera (, moh)	Lapson Tembo (, Moh)
Kelvin Mtumodzi (, queens)	Emmanuel Nkonde (, NTP)	Cecelia Tenesi (Nurse, MOH)
Robert Mtupanyama (, MoH)	George Nsit (, MOH)	Cecillia Tewesi (, MOH)
Patience Mtuwakale (, moh)	Alekaazawo Nyasulu (, MOH)	Harry Tsapa (CO, MOH)
Dave Muhasuwa (, MoH)	Jotham Nyasulu (, MOH)	Amin Wadi (, moh)
Agnes Mulilima (, moh)	Steven Nyika (, MOH)	Gladson Waluza (, MOH)
Fainala Muyila (Nurse, MOH)	Feliya Nyirenda (, Machinga)	Lloyd Wella (CO, MOH)
Theresa Mvula (, MOH)	Janet Nyirenda (, MOH)	Shaibu Witman (, MOH)
Ruockia Mwachumu (Nurse, MOH Nsanje DHO)	Jannet Nyirenda (, KCH)	Mabvuto Zondola (, 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.

26th March 2021

16 Appendix (Full National HIV Program Data)

HTC site report

Malawi (National)

2020 Q3 (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	675,880	100%
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Sex

Males tested	213,242	32%
Females tested	462,638	68%
Females non-pregnant	279,762	60%
Females pregnant	182,876	40%

Age

Children 0-14 yrs	45,395	7%
Children below 12 mths (Age group A)	1,114	2%
Children 12 mths - 14 yrs (Age group B)	44,281	98%
Adults 15+ years	630,485	93%
Young adults 15-24 years (Age group C)	280,923	45%
Older adults 25+ yrs (Age group D)	349,562	55%

HTC access type

PITC	524,614	78%
Family Referral Slip (FRS)	13,065	2%
Other (VCT, etc.) HTC access	138,201	20%

HTC first time / repeat

Never tested before	114,080	17%
Previously accessed HTC	561,800	83%
Last negative	539,402	96%
Last positive	21,753	4%
Last exposed infant	179	0%
Last inconclusive	466	0%

Counseling session type / Partner present

Counseled with partner / partner present	172,204	25%
Counseled alone / Partner not present	503,676	75%

Outcome summary (HIV test)

Single test negative	632,443	94%
Single test positive	0	0%
Test 1&2 negative	292	0%
Test 1&2 positive	41,617	6%
Test 1&2 discordant	1,528	0%

HTC site report

Malawi (National)

2020 Q3 (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	653,979	97%
New negative	632,798	97%
New positive	19,700	3%
New positive (non-sex dissag)	2,121	11%
New positive (dissag by sex)	17,579	89%
New positive male	7,234	41%
New positive female	10,345	59%
New inconclusive	1,422	0%
New exposed infants	59	0%
Confirmatory results (previous positive clients)	21,901	3%
Confirmatory positive	21,797	100%
Confirmatory positive (non-sex dissag)	2,140	10%
Confirmatory positive (dissag by sex)	19,657	90%
Confirmatory positive male	8,045	41%
Confirmatory positive female	11,612	59%
Confirmatory inconclusive	104	0%

Partner / Family HTC referral slips

Sum of slips given	31,087	100%
Total clients presenting with referral slip	13,065	42%
Total failed referrals (slips not returned)	18,022	58%

Clients tested in the community

HTC client details *

Total HTC clients served

Total HIV tested	16,479	100%
Sex		
Males tested	3,445	21%
Females tested	13,034	79%
Females non-pregnant	9,963	76%
Females pregnant	3,071	24%

Age

Children 0-14 yrs	1,144	7%
Children below 12 mths (Age group A)	3	0%
Children 12 mths - 14 yrs (Age group B)	1,141	100%
Adults 15+ years	15,335	93%
Young adults 15-24 years (Age group C)	8,328	54%
Older adults 25+ yrs (Age group D)	7,007	46%

HTC access type

PITC	7,061	43%
Family Referral Slip (FRS)	199	1%
Other (VCT, etc.) HTC access	9,219	56%

HTC site report

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

HTC client details *

HTC first time / repeat

Never tested before	3,129	19%
Previously accessed HTC	13,350	81%
Last negative	13,058	98%
Last positive	285	2%
Last exposed infant	4	0%
Last inconclusive	3	0%

Counseling session type / Partner present

Counseled with partner / partner present	1,071	6%
Counseled alone / Partner not present	15,408	94%

Outcome summary (HIV test)

Single test negative	15,784	96%
Single test positive	0	0%
Test 1&2 negative	0	0%
Test 1&2 positive	597	4%
Test 1&2 discordant	98	1%

Final result given to client

Results among clients never tested / last negative	16,199	98%
New negative	15,829	98%
New positive	333	2%
New positive (non-sex dissag)	75	23%
New positive (dissag by sex)	258	77%
New positive male	103	40%
New positive female	155	60%
New inconclusive	37	0%
New exposed infants	0	0%
Confirmatory results (previous positive clients)	280	2%
Confirmatory positive	270	96%
Confirmatory positive (non-sex dissag)	59	22%
Confirmatory positive (dissag by sex)	211	78%
Confirmatory positive male	89	42%
Confirmatory positive female	122	58%
Confirmatory inconclusive	10	4%

Partner / Family HTC referral slips

Sum of slips given	207	100%
Total clients presenting with referral slip	199	96%
Total failed referrals (slips not returned)	8	4%

Clients at stand-alone HTC sites

HTC client details *

Total HTC clients served

Total HIV tested	4,748	100%
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Sex

Males tested	1,879	40%
Females tested	2,869	60%
Females non-pregnant	1,990	69%
Females pregnant	879	31%

HTC site report

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

HTC client details *

Age

Children 0-14 yrs	163	3%
Children below 12 mths (Age group A)	3	2%
Children 12 mths - 14 yrs (Age group B)	160	98%
Adults 15+ years	4,585	97%
Young adults 15-24 years (Age group C)	2,065	45%
Older adults 25+ yrs (Age group D)	2,520	55%

HTC access type

PITC	2,574	54%
Family Referral Slip (FRS)	8	0%
Other (VCT, etc.) HTC access	2,166	46%

HTC first time / repeat

Never tested before	583	12%
Previously accessed HTC	4,165	88%
Last negative	4,016	96%
Last positive	146	4%
Last exposed infant	1	0%
Last inconclusive	2	0%

Counseling session type / Partner present

Counseled with partner / partner present	764	16%
Counseled alone / Partner not present	3,984	84%

Outcome summary (HIV test)

Single test negative	4,457	94%
Single test positive	0	0%
Test 1&2 negative	2	0%
Test 1&2 positive	283	6%
Test 1&2 discordant	6	0%

Final result given to client

Results among clients never tested / last negative	4,601	97%
New negative	4,462	97%
New positive	132	3%
New positive (non-sex dissag)	48	36%
New positive (dissag by sex)	84	64%
New positive male	42	50%
New positive female	42	50%
New inconclusive	6	0%
New exposed infants	1	0%
Confirmatory results (previous positive clients)	147	3%
Confirmatory positive	147	100%
Confirmatory positive (non-sex dissag)	41	28%
Confirmatory positive (dissag by sex)	106	72%
Confirmatory positive male	54	51%
Confirmatory positive female	52	49%
Confirmatory inconclusive	0	0%

HTC site report

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

HTC client details *

Partner / Family HTC referral slips

Sum of slips given	168	100%
Total clients presenting with referral slip	8	5%
Total failed referrals (slips not returned)	160	95%

Clients returning to facility after self-test

HTC client details *

Total HTC clients served

Total HIV tested	884	100%
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Sex

Males tested	391	44%
Females tested	493	56%
Females non-pregnant	465	94%
Females pregnant	28	6%

Age

Children 0-14 yrs	20	2%
Children below 12 mths (Age group A)	3	15%
Children 12 mths - 14 yrs (Age group B)	17	85%
Adults 15+ years	864	98%
Young adults 15-24 years (Age group C)	227	26%
Older adults 25+ yrs (Age group D)	637	74%

HTC access type

PITC	461	52%
Family Referral Slip (FRS)	70	8%
Other (VCT, etc.) HTC access	353	40%

HTC first time / repeat

Never tested before	93	11%
Previously accessed HTC	791	89%
Last negative	461	58%
Last positive	324	41%
Last exposed infant	3	0%
Last inconclusive	3	0%

Counseling session type / Partner present

Counseled with partner / partner present	129	15%
Counseled alone / Partner not present	755	85%

Outcome summary (HIV test)

Single test negative	512	58%
Single test positive	0	0%
Test 1&2 negative	26	3%
Test 1&2 positive	334	38%
Test 1&2 discordant	12	1%

HTC site report

Malawi (National)

2020 Q3 (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	574	65%
New negative	530	92%
New positive	41	7%
New positive (non-sex dissag)	0	0%
New positive (dissag by sex)	41	100%
New positive male	21	51%
New positive female	20	49%
New inconclusive	3	1%
New exposed infants	0	0%
Confirmatory results (previous positive clients)	310	35%
Confirmatory positive	296	95%
Confirmatory positive (non-sex dissag)	2	1%
Confirmatory positive (dissag by sex)	294	99%
Confirmatory positive male	145	49%
Confirmatory positive female	149	51%
Confirmatory inconclusive	14	5%

Partner / Family HTC referral slips

Sum of slips given	94	100%
Total clients presenting with referral slip	70	74%
Total failed referrals (slips not returned)	24	26%

HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (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	7,853	100%
Sex		
Male recipients	2,154	27%
Female recipients	5,699	73%
Non-pregnant	3,215	56%
Pregnant	2,484	44%

Last HIV test of recipient

Never tested	592	8%
Previously tested	7,261	92%
Last negative	7,012	97%
Last positive	247	3%
Not on ART	52	21%
On art	195	79%
Last inconclusive	2	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	12,869	100%
Intended end user distribution type		
Self (recipient)	5,018	39%
Secondary distribution	7,851	61%
Sex-partner	6,096	78%
Other	1,755	22%

Intended end user sex / age category

Total males	6,769	53%
Boys 13-14 years old	145	2%
Adolescent boys and young men 15-24 years old	1,720	25%
Adolescent boys 15 - 19 years old	490	28%
Young men 20 - 24 years old	1,230	72%
Adults	4,904	72%
Young adults 25 - 35 years old	2,788	57%
Middle adults 36 - 49 years old	1,848	38%
Older adults 50+	268	5%
Total females	6,100	47%
Girls 13-14 years old	225	4%
Adolescent girls and young women 15-24 years	2,621	43%
Adolescent girls 15 - 19 years old	998	38%
Young women 20 - 24 years old	1,623	62%
Adults	3,254	53%
Young adults 25 - 35 years old	2,139	66%
Middle adults 36 - 49 years old	916	28%
Older adults 50+	199	6%

Total condoms

Total condoms distributed	28,416	100%
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HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternity

HIV self test client details

Total HIV self-test kit *
1,682 100%

Sex	
Male recipients	88 5%
Female recipients	1,594 95%
Non-pregnant	1,590 100%
Pregnant	4 0%

Last HIV test of recipient

Never tested	28	2%
Previously tested	1,654	98%
Last negative	1,644	99%
Last positive	10	1%
Not on ART	3	30%
On art	7	70%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	2,411	100%
Intended end user distribution type		
Self (recipient)	146	6%
Secondary distribution	2,265	94%
Sex-partner	1,750	77%
Other	515	23%

Intended end user sex / age category

Total males	1,837	76%
Boys 13-14 years old	18	1%
Adolescent boys and young men 15-24 years old	609	33%
Adolescent boys 15 - 19 years old	123	20%
Young men 20 - 24 years old	486	80%
Adults	1,210	66%
Young adults 25 - 35 years old	721	60%
Middle adults 36 - 49 years old	452	37%
Older adults 50+	37	3%
Total females	574	24%
Girls 13-14 years old	45	8%
Adolescent girls and young women 15-24 years	241	42%
Adolescent girls 15 - 19 years old	121	50%
Young women 20 - 24 years old	120	50%
Adults	288	50%
Young adults 25 - 35 years old	159	55%
Middle adults 36 - 49 years old	110	38%
Older adults 50+	19	7%

Total condoms

Total condoms distributed	127	100%
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HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (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	3,033	100%
Sex		
Male recipients	1,358	45%
Female recipients	1,675	55%
Non-pregnant	1,422	85%
Pregnant	253	15%

Last HIV test of recipient

Never tested	332	11%
Previously tested	2,701	89%
Last negative	1,739	64%
Last positive	811	30%
Not on ART	24	3%
On art	787	97%
Last inconclusive	151	6%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	5,540	100%
Intended end user distribution type		
Self (recipient)	1,793	32%
Secondary distribution	3,747	68%
Sex-partner	2,321	62%
Other	1,426	38%

Intended end user sex / age category

Total males	2,875	52%
Boys 13-14 years old	48	2%
Adolescent boys and young men 15-24 years old	760	26%
Adolescent boys 15 - 19 years old	245	32%
Young men 20 - 24 years old	515	68%
Adults	2,067	72%
Young adults 25 - 35 years old	1,123	54%
Middle adults 36 - 49 years old	851	41%
Older adults 50+	93	4%
Total females	2,665	48%
Girls 13-14 years old	142	5%
Adolescent girls and young women 15-24 years	1,032	39%
Adolescent girls 15 - 19 years old	448	43%
Young women 20 - 24 years old	584	57%
Adults	1,491	56%
Young adults 25 - 35 years old	951	64%
Middle adults 36 - 49 years old	487	33%
Older adults 50+	53	4%

Total condoms

Total condoms distributed	14,985	100%
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HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (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	75,255	100%
Sex		
Male recipients	30,973	41%
Female recipients	44,282	59%
Non-pregnant	33,565	76%
Pregnant	10,717	24%

Last HIV test of recipient

Never tested	6,134	8%
Previously tested	69,121	92%
Last negative	65,020	94%
Last positive	4,072	6%
Not on ART	831	20%
On art	3,241	80%
Last inconclusive	29	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	130,671	100%
Intended end user distribution type		
Self (recipient)	49,085	38%
Secondary distribution	81,586	62%
Sex-partner	57,301	70%
Other	24,285	30%

Intended end user sex / age category

Total males	68,844	53%
Boys 13-14 years old	1,668	2%
Adolescent boys and young men 15-24 years old	19,233	28%
Adolescent boys 15 - 19 years old	6,156	32%
Young men 20 - 24 years old	13,077	68%
Adults	47,943	70%
Young adults 25 - 35 years old	27,322	57%
Middle adults 36 - 49 years old	18,133	38%
Older adults 50+	2,488	5%
Total females	61,827	47%
Girls 13-14 years old	2,759	4%
Adolescent girls and young women 15-24 years	26,012	42%
Adolescent girls 15 - 19 years old	10,471	40%
Young women 20 - 24 years old	15,541	60%
Adults	33,056	53%
Young adults 25 - 35 years old	21,901	66%
Middle adults 36 - 49 years old	9,822	30%
Older adults 50+	1,333	4%

Total condoms

Total condoms distributed	361,901	100%
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HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (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	11,133 100%
Sex	
Male recipients	3,899 35%
Female recipients	7,234 65%
Non-pregnant	5,523 76%
Pregnant	1,711 24%

Last HIV test of recipient

Never tested	1,206	11%
Previously tested	9,927	89%
Last negative	9,271	93%
Last positive	655	7%
Not on ART	88	13%
On art	567	87%
Last inconclusive	1	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	20,369	100%
Intended end user distribution type		
Self (recipient)	7,595	37%
Secondary distribution	12,774	63%
Sex-partner	8,464	66%
Other	4,310	34%

Intended end user sex / age category

Total males	10,359	51%
Boys 13-14 years old	370	4%
Adolescent boys and young men 15-24 years old	3,216	31%
Adolescent boys 15 - 19 years old	996	31%
Young men 20 - 24 years old	2,220	69%
Adults	6,773	65%
Young adults 25 - 35 years old	4,096	60%
Middle adults 36 - 49 years old	2,460	36%
Older adults 50+	217	3%
Total females	10,010	49%
Girls 13-14 years old	628	6%
Adolescent girls and young women 15-24 years	4,731	47%
Adolescent girls 15 - 19 years old	2,009	42%
Young women 20 - 24 years old	2,722	58%
Adults	4,651	46%
Young adults 25 - 35 years old	3,199	69%
Middle adults 36 - 49 years old	1,284	28%
Older adults 50+	168	4%

Total condoms

Total condoms distributed	42,621	100%
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HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (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	867	100%
Sex		
Male recipients	396	46%
Female recipients	471	54%
Non-pregnant	424	90%
Pregnant	47	10%

Last HIV test of recipient

Never tested	77	9%
Previously tested	790	91%
Last negative	664	84%
Last positive	126	16%
Not on ART	45	36%
On art	81	64%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	1,431	100%
Intended end user distribution type		
Self (recipient)	671	47%
Secondary distribution	760	53%
Sex-partner	620	82%
Other	140	18%

Intended end user sex / age category

Total males	702	49%
Boys 13-14 years old	21	3%
Adolescent boys and young men 15-24 years old	213	30%
Adolescent boys 15 - 19 years old	66	31%
Young men 20 - 24 years old	147	69%
Adults	468	67%
Young adults 25 - 35 years old	291	62%
Middle adults 36 - 49 years old	160	34%
Older adults 50+	17	4%
Total females	729	51%
Girls 13-14 years old	36	5%
Adolescent girls and young women 15-24 years	326	45%
Adolescent girls 15 - 19 years old	133	41%
Young women 20 - 24 years old	193	59%
Adults	367	50%
Young adults 25 - 35 years old	248	68%
Middle adults 36 - 49 years old	107	29%
Older adults 50+	12	3%

Total condoms

Total condoms distributed	594	100%
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HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (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	513	100%
Sex		
Male recipients	325	63%
Female recipients	188	37%
Non-pregnant	187	99%
Pregnant	1	1%

Last HIV test of recipient

Never tested	45	9%
Previously tested	468	91%
Last negative	417	89%
Last positive	51	11%
Not on ART	3	6%
On art	48	94%
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	1,046	100%
Intended end user distribution type		
Self (recipient)	406	39%
Secondary distribution	640	61%
Sex-partner	528	83%
Other	112	18%

Intended end user sex / age category

Total males	520	50%
Boys 13-14 years old	14	3%
Adolescent boys and young men 15-24 years old	115	22%
Adolescent boys 15 - 19 years old	42	37%
Young men 20 - 24 years old	73	63%
Adults	391	75%
Young adults 25 - 35 years old	224	57%
Middle adults 36 - 49 years old	163	42%
Older adults 50+	4	1%
Total females	526	50%
Girls 13-14 years old	19	4%
Adolescent girls and young women 15-24 years	219	42%
Adolescent girls 15 - 19 years old	66	30%
Young women 20 - 24 years old	153	70%
Adults	288	55%
Young adults 25 - 35 years old	200	69%
Middle adults 36 - 49 years old	87	30%
Older adults 50+	1	0%

Total condoms

Total condoms distributed	5,304	100%
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HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (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	165	100%
Sex		
Male recipients	42	25%
Female recipients	123	75%
Non-pregnant	122	99%
Pregnant	1	1%

Last HIV test of recipient

Never tested	32	19%
Previously tested	133	81%
Last negative	133	100%
Last positive	0	0%
Not on ART	0	
On art	0	
Last inconclusive	0	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	281	100%
Intended end user distribution type		
Self (recipient)	150	53%
Secondary distribution	131	47%
Sex-partner	120	92%
Other	11	8%

Intended end user sex / age category

Total males	136	48%
Boys 13-14 years old	1	1%
Adolescent boys and young men 15-24 years old	35	26%
Adolescent boys 15 - 19 years old	8	23%
Young men 20 - 24 years old	27	77%
Adults	100	74%
Young adults 25 - 35 years old	73	73%
Middle adults 36 - 49 years old	22	22%
Older adults 50+	5	5%
Total females	145	52%
Girls 13-14 years old	0	0%
Adolescent girls and young women 15-24 years	78	54%
Adolescent girls 15 - 19 years old	27	35%
Young women 20 - 24 years old	51	65%
Adults	67	46%
Young adults 25 - 35 years old	42	63%
Middle adults 36 - 49 years old	23	34%
Older adults 50+	2	3%

Total condoms

Total condoms distributed	651	100%
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HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (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	0
Sex	
Male recipients	0
Female recipients	0
Non-pregnant	0
Pregnant	0

Last HIV test of recipient

Never tested	0
Previously tested	0
Last negative	0
Last positive	0
Not on ART	0
On art	0
Last inconclusive	0

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	0
Intended end user distribution type	
Self (recipient)	0
Secondary distribution	0
Sex-partner	0
Other	0

Intended end user sex / age category

Total males	0
Boys 13-14 years old	0
Adolescent boys and young men 15-24 years old	0
Adolescent boys 15 - 19 years old	0
Young men 20 - 24 years old	0
Adults	0
Young adults 25 - 35 years old	0
Middle adults 36 - 49 years old	0
Older adults 50+	0
Total females	0
Girls 13-14 years old	0
Adolescent girls and young women 15-24 years	0
Adolescent girls 15 - 19 years old	0
Young women 20 - 24 years old	0
Adults	0
Young adults 25 - 35 years old	0
Middle adults 36 - 49 years old	0
Older adults 50+	0

Total condoms

Total condoms distributed	0
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HIV self-test (ST) distribution

Malawi (National)

2020 Q3 (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	7,529	100%
Sex		
Male recipients	3,616	48%
Female recipients	3,913	52%
Non-pregnant	3,751	96%
Pregnant	162	4%

Last HIV test of recipient

Never tested	1,371	18%
Previously tested	6,158	82%
Last negative	5,931	96%
Last positive	226	4%
Not on ART	25	11%
On art	201	89%
Last inconclusive	1	0%

HIV ST kits given: Intended end user attributes

Total self-test kits distributed to end users	11,869	100%
Intended end user distribution type		
Self (recipient)	6,647	56%
Secondary distribution	5,222	44%
Sex-partner	3,625	69%
Other	1,597	31%

Intended end user sex / age category

Total males	6,248	53%
Boys 13-14 years old	184	3%
Adolescent boys and young men 15-24 years old	2,227	36%
Adolescent boys 15 - 19 years old	860	39%
Young men 20 - 24 years old	1,367	61%
Adults	3,837	61%
Young adults 25 - 35 years old	2,233	58%
Middle adults 36 - 49 years old	1,335	35%
Older adults 50+	269	7%
Total females	5,621	47%
Girls 13-14 years old	584	10%
Adolescent girls and young women 15-24 years	2,636	47%
Adolescent girls 15 - 19 years old	1,409	53%
Young women 20 - 24 years old	1,227	47%
Adults	2,401	43%
Young adults 25 - 35 years old	1,553	65%
Middle adults 36 - 49 years old	723	30%
Older adults 50+	125	5%

Total condoms

Total condoms distributed	32,473	100%
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Blood safety

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Infect. disease screening among potential donors

*

HIV screening

HIV testing not done	2,092	26%
Tested for HIV	5,834	74%
HIV negative	5,618	96%
HIV positive	216	4%

Hepatitis B screening

HepB testing not done	2,279	29%
Tested for Hepatitis B	5,647	71%
HepB Negative	5,411	96%
HepB Positive	236	4%

Hepatitis C screening

HepC testing not done	4,711	59%
Tested for Hepatitis C	3,215	41%
HepC Negative	3,172	99%
HepC Positive	43	1%

Syphilis screening

Syphilis testing not done	2,100	26%
Tested for Syphilis	5,826	74%
Syphilis Negative	5,570	96%
Syphilis Positive	256	4%

Malaria screening

Malaria testing not done	2,404	30%
Tested for malaria	5,522	70%
Malaria Negative	4,894	89%
Malaria Positive	628	11%

Summary screening outcome

Not donated	3,009	38%
Donated	4,917	62%
Screened for at least HIV, HepB and syphilis	4,120	84%
Screened for HIV, HepB, HepC, Syphilis, Malaria	3,262	79%
Screened for HIV, HepB, Syphilis	858	21%
Screened for HIV, HepB	76	2%
Screened for HIV only	149	3%
Screened with any other combination of tests	572	12%

Cross-matching report

*

Blood group typing (for units and patients)

Total blood group typing done	19,920	100%
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Blood units cross-matched (by source)

Total blood units cross-matched	13,058	100%
Total units from MBTS (estimated)	8,141	62%
Total units from replacement donors	4,917	38%

Blood units cross-matched by patient group

Units cross-matched for maternity	3,425	26%
Units cross-matched for paediatrics	2,498	19%
Units cross-matched for other ward	7,135	55%

Blood safety

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Cross-matching report

*

Transfusion reactions

Units transfused without adverse events	13,051	100%
Units with suspected transfusion reactions	1	0%
Units with confirmed transfusion reactions	6	0%

HIV exposed child follow-up

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Age 2 months

Age cohort outcomes *

Total children in birth cohort

Total children registered	10,309	100%
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CPT status

On CPT	8,935	87%
Not on CPT	1,374	13%

HIV status

Current HIV infection status unknown	2,742	27%
HIV infection not confirmed, not ART eligible	2,740	100%
HIV infection not confirmed, ART eligible (PSHD)	2	0%
Current HIV infection status known	7,567	73%
Confirmed not infected	7,496	99%
Confirmed infected (ART eligible)	71	1%

ART eligibility summary

Not eligible for ART	10,236	99%
ART eligible	73	1%
ART not initiated	6	8%
Initiated ART	67	92%

Primary follow-up outcome

Discharged uninfected	38	0%
Continue follow-up	8,928	93%
Started ART	67	1%
Defaulted	479	5%
Died	37	0%

Transfers between sites

Total not transferred out	9,549	93%
Transferred out	760	7%

Age 12 months

Age cohort outcomes *

Total children in birth cohort

Total children registered	11,850	100%
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CPT status

On CPT	8,659	73%
Not on CPT	3,191	27%

HIV status

Current HIV infection status unknown	3,406	29%
HIV infection not confirmed, not ART eligible	3,403	100%
HIV infection not confirmed, ART eligible (PSHD)	3	0%
Current HIV infection status known	8,444	71%
Confirmed not infected	8,256	98%
Confirmed infected (ART eligible)	188	2%

HIV exposed child follow-up

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Age cohort outcomes *

ART eligibility summary

Not eligible for ART	11,659	98%
ART eligible	191	2%
ART not initiated	2	1%
Initiated ART	189	99%

Primary follow-up outcome

Discharged uninfected	58	1%
Continue follow-up	8,593	83%
Started ART	189	2%
Defaulted	1,464	14%
Died	108	1%

Transfers between sites

Total not transferred out	10,412	88%
Transferred out	1,438	12%

Age 24 months

Age cohort outcomes *

Total children in birth cohort

Total children registered	12,405	100%
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CPT status

On CPT	377	3%
Not on CPT	12,028	97%

HIV status

Current HIV infection status unknown	4,222	34%
HIV infection not confirmed, not ART eligible	4,218	100%
HIV infection not confirmed, ART eligible (PSHD)	4	0%
Current HIV infection status known	8,183	66%
Confirmed not infected	7,969	97%
Confirmed infected (ART eligible)	214	3%

ART eligibility summary

Not eligible for ART	12,187	98%
ART eligible	218	2%
ART not initiated	-2	-1%
Initiated ART	220	101%

Primary follow-up outcome

Discharged uninfected	7,717	71%
Continue follow-up	276	3%
Started ART	220	2%
Defaulted	2,490	23%
Died	116	1%

Transfers between sites

Total not transferred out	10,819	87%
Transferred out	1,586	13%

Antenatal Care

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

New ANC registrations in reporting period

*

Women with first visit in reporting period

New women registered	158,254	100%
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ANC cohort analysis

*

HIV status ascertainment

HIV status not ascertained	3,126	2%
HIV status ascertained	155,128	98%
Valid previous test result	9,530	6%
Previous negative	1,459	15%
Previous positive	8,071	85%
New test at ANC	145,598	94%
New negative	143,316	98%
New positive	2,282	2%

HIV status summary

Total women HIV negative	144,775	93%
Total women HIV positive	10,353	7%

PMTCT regimen mother

No ARVs	79	1%
Any ARVs	10,274	99%
ART (by time of initiation)	10,274	100%
Already on ART when starting ANC	8,012	78%
Started ART at 0-27 weeks of pregnancy	2,018	20%
Started ART at 28+ weeks of preg.	244	2%

ANC women after 6 months

ANC cohort analysis

*

Total women completing ANC in the reporting period

Total women in booking cohort	171,076	100%
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Syphilis status

Not tested for syphilis	27,275	16%
Tested for syphilis	143,801	84%
Syphilis negative	140,371	98%
Syphilis positive	3,430	2%

HIV status ascertainment

HIV status not ascertained	2,189	1%
HIV status ascertained	168,887	99%
Valid previous test result	11,033	7%
Previous negative	2,896	26%
Previous positive	8,137	74%
New test at ANC	157,854	93%
New negative	155,244	98%
New positive	2,610	2%

HIV status summary

Total women HIV negative	158,140	94%
Total women HIV positive	10,747	6%

Antenatal Care

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

ANC cohort analysis

*

CPT status (among HIV pos)

Not on CPT	129	1%
On CPT	10,618	99%

PMTCT regimen mother

No ARVs	80	1%
Any ARVs	10,667	99%
ART (by time of initiation)	10,667	100%
Already on ART when starting ANC	8,124	76%
Started ART at 0-27 weeks of pregnancy	2,236	21%
Started ART at 28+ weeks of preg.	307	3%

Baby's ARVs dispensed

No ARVs dispensed for infant	175	2%
ARVs dispensed for infant	10,572	98%

Maternity

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

Maternal details *

Admissions in the reporting period

Total admissions (referrals double-counted)	146,266	100%
Not referred to other site (total women)	137,088	94%
Referred out before delivery (multiple admissions)	9,178	6%

HIV status ascertainment

HIV status not ascertained	8,222	6%
HIV status ascertained	138,044	94%
Valid previous test result	10,276	7%
Previous negative	352	3%
Previous positive	9,924	97%
New test at maternity	127,768	93%
New negative	127,502	100%
New positive	266	0%

HIV status summary

Total women HIV negative	127,854	93%
Total women HIV positive	10,190	7%

ARVs during pregnancy (among HIV pos)

No ARV in pregnancy	41	0%
Any ARVs	10,149	100%
ART (by time of initiation)	10,149	100%
ART initiated before pregnancy	9,683	95%
ART initiated in 1st / 2nd trimester	256	3%
ART initiated in 3rd trimester	109	1%
ART initiated during labour	101	1%

Infant details *

Single babies / multiple deliveries

Total babies delivered	140,370	100%
Single babies	135,946	97%
Twin / multiple babies	4,424	3%

Infant survival

Total live births	137,803	98%
Discharged alive	136,800	99%
Neonatal deaths	1,003	1%
Stillbirths	2,567	2%
Stillbirth, fresh	1,289	50%
Stillbirth, macerated	1,278	50%

HIV exposure / ARV proph. (among discharged alive)

Infants with unknown HIV exposure status	4,781	3%
Infants with known HIV exposure status	132,019	97%
Not HIV exposed	122,393	93%
HIV exposed	9,626	7%
Received no ARVs	501	5%
Received ARVs	9,125	95%
Nevirapine	9,125	100%

ART cohort analysis

Malawi (National)

2020 Q3 (Quarter)

Registration details *

ART clinic registrations

Total ART clinic registrations	28,152	100%
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Registration type

ART initiations, first time (total patients)	19,384	69%
ART initiations, first time (non sex-disagg.)	16	0%
ART initiations, first time (by sex)	19,368	100%
ART initiations, first time, males	7,514	39%
ART initiations, first time, females	11,854	61%
ART initiations, first time, females non-pregnant	8,809	74%
ART initiations, first time, females pregnant	3,045	26%
ART re-initiations	206	1%
ART transfers in	8,606	31%

Sex

Males	10,698	38%
Females	17,558	62%
Non-pregnant	13,624	78%
Pregnant	3,934	22%

Age at ART initiation

Adults 15+ yrs	26,524	94%
Children 0-14 yrs	1,732	6%
Children 2-14 yrs	1,292	75%
Children below 24 mths	440	25%

Reason for starting ART

Presumed severe HIV Disease	20	0%
Confirmed HIV infection	28,236	100%
WHO stage 1 or 2	25,148	89%
CD4 below threshold	1,223	5%
CD4 unknown or >threshold	23,925	95%
PCR infants	97	0%
Children 12-59 mths	471	2%
Pregnant women	3,885	16%
Breastfeeding mothers	817	3%
Asymptomatic / mild	18,655	78%
WHO stage 3	2,473	9%
WHO stage 4	569	2%
Unknown / reason outside of guidelines	46	0%

TB at ART initiation

Never TB / TB > 24 months ago	27,788	98%
TB within the last 24 months	208	1%
Current episode of TB	260	1%

Kaposi's sarcoma at ART initiation

No KS	28,081	100%
Patients with KS	71	0%

ART cohort analysis

Malawi (National)

2020 Q3 (Cumulative)

Registration details *

ART clinic registrations

Total ART clinic registrations	1,841,246	100%
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Registration type

ART initiations, first time (total patients)	1,452,459	80%
ART initiations, first time (non sex-disagg.)	312,769	22%
ART initiations, first time (by sex)	1,139,690	78%
ART initiations, first time, males	427,351	37%
ART initiations, first time, females	712,339	63%
ART initiations, first time, females non-pregnant	568,904	80%
ART initiations, first time, females pregnant	143,435	20%
ART re-initiations	26,063	1%
ART transfers in	348,226	19%

Sex

Males	685,717	37%
Females	1,155,481	63%
Non-pregnant	927,068	80%
Pregnant	228,413	20%

Age at ART initiation

Adults 15+ yrs	1,691,867	92%
Children 0-14 yrs	149,334	8%
Children 2-14 yrs	114,547	77%
Children below 24 mths	34,787	23%

Reason for starting ART

Presumed severe HIV Disease	4,463	0%
Confirmed HIV infection	1,836,738	100%
WHO stage 1 or 2	1,116,476	61%
CD4 below threshold	368,806	33%
CD4 unknown or >threshold	747,670	67%
PCR infants	4,490	1%
Children 12-59 mths	21,973	3%
Pregnant women	214,310	29%
Breastfeeding mothers	66,736	9%
Asymptomatic / mild	440,161	59%
WHO stage 3	581,091	32%
WHO stage 4	125,943	7%
Unknown / reason outside of guidelines	13,228	1%

TB at ART initiation

Never TB / TB > 24 months ago	1,766,142	96%
TB within the last 24 months	37,476	2%
Current episode of TB	37,583	2%

Kaposi's sarcoma at ART initiation

No KS	1,820,208	99%
Patients with KS	21,038	1%

ART cohort analysis

Malawi (National)

2020 Q3 (Cumulative)

ART outcomes

*

Primary follow-up outcomes

Total alive on ART	943,954	63%
Alive on ART at site of last registration	852,425	90%
ART patients in transit between sites	91,529	10%
Defaulted	406,697	27%
Stopped ART	13,049	1%
Total died	129,230	9%
Died month 1	24,324	19%
Died month 2	14,896	12%
Died month 3	9,867	8%
Died month 4+	80,143	62%

Transfers between sites

Total not transferred out	1,401,491	76%
Transferred out	439,755	24%

ART cohort analysis

Malawi (National)

2020 Q3 (Cumulative)

ART outcomes

ART regimens

First line regimens	825,529	97%
Adult formulation	816,098	99%
Regimen 0A	117	0%
Regimen 2A	1,381	0%
Regimen 4A	245	0%
Regimen 5A	15,952	2%
Regimen 6A	481	0%
Regimen 13A	782,340	96%
Regimen 14A	5,919	1%
Regimen 15A	9,535	1%
Regimen 16A	19	0%
Regimen 17A	109	0%
Paed. formulation	9,431	1%
Regimen 0P	79	1%
Regimen 2P	2,723	29%
Regimen 4P	91	1%
Regimen 14P	209	2%
Regimen 15P	6,238	66%
Regimen 16P	74	1%
Regimen 17P	17	0%
Second line regimens	24,077	3%
Adult formulation	12,526	52%
Regimen 7A	3,969	32%
Regimen 8A	7,513	60%
Regimen 9A	747	6%
Regimen 10A	150	1%
Regimen 11A	88	1%
Regimen 12A	59	0%
Paed. Formulation	11,551	48%
Regimen 9P Tabs	8,797	76%
Regimen 9P Gran	2,306	20%
Regimen 11P Tabs	303	3%
Regimen 11P Gran	145	1%
Other regimen (adult / paed)	2,819	0%

Adherence

Adherence unknown (not recorded)	36,072	4%
Adherence recorded	816,353	96%
0-3 doses missed	584,698	72%
4+ doses missed	231,655	28%

ART side effects

Side effects unknown (not recorded)	23,426	3%
Side effects recorded	828,981	97%
No side effects	821,094	99%
Any side effects	7,887	1%

ART cohort analysis

Malawi (National)

2020 Q3 (Cumulative)

ART outcomes

*

Current TB status among ART patients (ICF)

ICF not done (Current TB status unknown/ not circ)	12,042	1%
ICF done	840,383	99%
TB not suspected	832,699	99%
TB suspected	3,374	0%
TB confirmed	4,310	1%
TB confirmed, not on treatment	2,160	50%
TB confirmed, on TB treatment	2,150	50%

Pregnant / Breastfeeding

Pregnant females	852,425	100%
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Viral load monitoring cohort report

Malawi (National)

2020 Q3 (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	163,361	100%
Reason for VL test		
Routine / scheduled monitoring	147,469	90%
Extra-schedular	13,665	8%
Targeted (clinical suspicion of failure)	2,629	19%
Follow-up after high VL	11,036	81%
Replacement of lost sample / missing result	2,227	1%

Results for VL samples collected 6 months ago

Results for VL samples collected 6 months ago	*	
Total VL samples with outcomes		
Total VL samples collected 6 months ago	154,732	100%
VL test results		
Valid results	135,016	87%
<1000 copies / ml	123,457	91%
1000+ copies / ml	11,559	9%
Rejected samples / invalid results	1,058	1%
Missing / outstanding results	18,658	12%

Result transmission type

Paper results	132,288	97%
Electronic results	4,548	3%

Time from sample collection to receipt of results

0-4 Weeks	36,339	23%
5-8 Weeks	42,794	28%
9-12 Weeks	32,015	21%
13+ Weeks / still missing	43,584	28%

Time from sample collection to client notification

0-4 Weeks	17,739	11%
5-8 Weeks	20,219	13%
9-12 Weeks	23,613	15%
13+ Weeks / pending	93,161	60%

Patients with high VL: outcome after 6 months

Patients in high VL cohort	*	
Total high VL patients evaluated after 6 months	15,936	100%

Initial high VL: reason for test

Routine / scheduled monitoring	14,303	90%
Targeted (clinical suspicion of failure)	1,217	8%
Repeat sample	416	3%

Intensive adherence counselling

3 Sessions completed	9,570	60%
Sessions not completed	6,366	40%

Viral load monitoring cohort report

Malawi (National)

2020 Q3 (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	6,514	41%
Valid results	4,677	72%
<1000 copies / ml	3,425	73%
1000+ copies / ml	1,252	27%
Rejected samples / invalid results	26	0%
Missing / outstanding results	1,811	28%
Follow-up sample pending	9,422	59%

Preliminary opinion

Conclusion made	5,248	33%
Continue current regimen	4,615	88%
Switch to 2nd line ART	633	12%
Conclusion pending	10,688	67%

Final treatment decision (2nd line prescriber)

Decision made	4,466	28%
Continue current regimen	3,797	85%
Switch to 2nd line ART	655	15%
Refer to HIV specialist	14	0%
Decision pending	11,470	72%

STI site report

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

STI clients treated in the reporting period

*

Total STI clients

Total STI clients treated	97,981	100%
Index patients treated (symptomatic)	79,849	81%
Partners treated	18,132	19%

Sex

Males	40,514	41%
Males Non-circumcised	28,108	69%
Males Circumcised	12,406	31%
Females	57,467	59%
Non-pregnant	49,101	85%
Pregnant	8,366	15%

Age group

Age group A (0-19 years)	7,727	8%
Age group B (20-24 years)	22,752	23%
Age group C (25+ years)	67,502	69%

Client type

Symptomatic cases	86,756	89%
Index cases	79,849	92%
Partners symptomatic	6,907	8%
Partners asymptomatic	11,225	11%

STI treatment history

Never treated for STI	72,843	74%
Previously treated for STI	25,138	26%
Old >3 months ago	19,237	77%
Recent ≤3 months ago	5,901	23%

STI syndromic diagnosis

GUD	12,308	12%
UD	28,473	28%
AVD	30,035	29%
Low risk	7,882	26%
High risk	22,153	74%
LAP	12,814	12%
SS	1,145	1%
BU	593	1%
BA	904	1%
NC	274	0%
Genital Warts	418	0%
Syphilis RPR VDRL	11,097	11%
Other STI	5,420	5%

STI partner notification

Total partner notification slips issued	22,433	100%
Total partners returned	18,132	81%
Total partners not seen	4,301	19%

STI site report

Malawi (National)

2020 Q3 (1st month of quarter, 2nd month of quarter, 3rd month of quarter)

STI clients treated in the reporting period

*

HIV test / ART status

HIV status not ascertained	9,468	10%
HIV status ascertained	88,513	90%
HIV negative (new test)	72,354	82%
HIV positive	16,159	18%
New positive	2,037	13%
Previous positive	14,122	87%
Not on ART	843	6%
On ART	13,279	94%

STI clients referred for services

Lab	2,031	4%
Gynae review	524	1%
Surgical review	1,018	2%
Repeat HTC	40,212	73%
ART (for assessment)	4,279	8%
Other (service referrals)	3,592	7%
VMMC	3,098	6%