
Assessment of the National Patient Appointment, Tracking, Referral and Linkage Systems in Health Facilities and Communities in Selected Districts in Tanzania

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List of Abbreviations

AIDS	Acquired Immuno Deficiency Syndrome
ART	Antiretroviral Therapy
CDC	Centers for Disease Control and Prevention
CHACC	Community Health AIDS Control Coordinator
CHMT	Council Health Management Team
CSSM	Comprehensive Supportive Supervision and Mentoring
CTC	Care and Treatment Clinic
DACC	District AIDS Control Coordinator
DLT	District Laboratory Technologist
DMO	District Medical Officer
DRCC	District Reproductive and Child Health Coordinator
EIMC	Early Infant Male Circumcision
FBO	Faith Based Organization
FP	Family Planning
HBC	Home based Care
HCW	Health Care Worker
HIV	Human Immunodeficiency Virus
HRSA	Health Resources and Services Administration
HTC	HIV Testing and Counselling
HTCFP	HIV Testing and Counselling Focal Person
ID	Identification
IPD	In Patent department
I-TECH	International Training and Education Center for Health
MOHCDGEC	Ministry of Health Community Development, Gender, Elderly and Children
NACP	National AIDS Control Program
OPD	Out Patient Department
PITC	Provider Initiated Testing and Counselling
PMTCT	Prevention of Mother to Child Transmission
PTC	Post Test Club
RACC	Regional AIDS Control Coordinator
RCH	Reproductive and Child Health
RHMTs	Regional Health Management Teams
RMO	Regional Medical Officer
SIMS	Site Improvement and Monitoring System
SOP	Standard Operating Procedures
STI	Sexually Transmitted Infection
TB	Tuberculosis
VCT	Voluntary Testing and Counselling
VEO	Village Executive Officer
VMMC	Voluntary Medical Male Circumcision
WEO	Ward Executive Officer

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Executive Summary

Patient retention on ART has been a challenge in Tanzania. In 2013, the Tanzania Implementation of Care and Treatment service report showed that the dropout rate per year was 26.4 per 100 person-years for those who started ART in 2010. One of the greatest barriers to fully controlling the HIV epidemic has been the health system's ability to identify, link, and retain HIV-infected individuals in care. To get better understanding of the underlying factors of high dropout rate, I-TECH conducted an assessment of the national patient appointment, tracking, and referral and linkage systems as a strategy to develop recommendations for addressing some of those challenges in order to meet the 90-90-90 targets by 2020.

The assessment used both qualitative and quantitative data collection techniques. Quantitative data was collected from the two systems (appointment and tracking registers as well as referral and Linkages) that have been generated over the past years. Qualitative data was collected through in-depth interviews conducted with key informants and in focus group discussions. A total of 16 health facilities were visited in four regions (Dar es Salaam, Mbeya, Tabora and Shinyanga) and a total of 92 Health Care Workers were interviewed from Hospitals, Health Centers and dispensaries.

The results of the assessment showed that although nearly all sites assessed were engaged in some parts of the appointment and tracking, referrals and linkage system, utilization levels varied greatly. Only 6 out of 16 (37.5%) sites could provide data to evaluate referral completion. Of these, the rate of referral success was 35/52 or 67%. Results also showed that the appointment and tracking system is not being deployed or utilized according to MOH guidelines, so its effectiveness in reducing loss to follow up (LTFU) is unknown.

SECTION I

Introduction and Background of the Assessment

1.1 Background of the Assessment

The Government of Tanzania is committed to achieving HIV epidemic control by achieving 90-90-90 in 2020. This harmonized UNAIDS target which intends to by 2020 have 90% of all people living with HIV will know their HIV status, 90% of all people diagnosed with HIV infection will receive sustained antiretroviral therapy and 90% of all people receiving antiretroviral therapy will achieve viral suppression. In addition to these targets, the Government of Tanzania's Health Sector HIV/AIDS Strategic Plan (HSHSP) also mandates that all children under 15 years old living with HIV are put on ART and 90% are retained in care and that 80% of all eligible PLHIVs are put on and retained on an appropriate ART regimen by the year 2017¹. However retention on ART after initiation in Tanzania has been a challenge; according to the Tanzania Implementation of Care and Treatment service report, 2013 shows that drop up rate by one year was 23.0 per 100 person-years for those started ART in 2005 or before and increased to 26.4 per 100 person-years for those who started ART in 2010. One of the greatest barriers to fully controlling the HIV epidemic is the health system's ability to identify, link, and retain HIV-infected individuals in care. Epidemiologic studies in sub-Saharan Africa have demonstrated remarkably high loss to follow up in HIV treatment programs which highlights missed opportunities for proven treatment and prevention interventions.^{2,3,4} A recent study of the HIV treatment cascade in four countries, including Tanzania, found that by 12 months post-enrollment, 44% of enrolled adults had poor outcomes including loss to follow up or death⁵.

In 2012, the Ministry of Health, Community Development Gender, Elderly and Children (MOHCDGEC) in Tanzania, through National AIDS Control Program (NACP), introduced a HIV patients' appointment, monitoring and tracking system. The aim of this system was to improve the outcomes of HIV management in the country by improving linkages to care and reducing ART patients' lost to follow-up. This system uses an appointment and tracking register to collect information on HIV patients' attendance in a single location. The information on the appointment registers enables care and treatment

¹ The Third Health Sector HIV/AIDS Strategic Plan, 2013-2017, Ministry of Health and Social Welfare, National AIDS Control Program

² Brinkhof MW, Dabis F, Myer L, et al. Early loss of HIV-infected patients on potent antiretroviral therapy programmes in lower-income countries. *Bull World Health Organ*. 2008;86(7):559-567.

³ Fox M, Rosen S. Patient retention in antiretroviral therapy programs up to three years on treatment in sub-Saharan Africa, 2007-2009: systematic review. *Trop Med Int Health*. 2010;15 Suppl 1:1-15.

⁴ Rosen S, Fox MP, Gill CJ. Patient retention in antiretroviral therapy programs in sub-Saharan Africa: a systematic review. *PLoS Med*. 2007;4(10):e298

⁵ McNairy ML, Lamb MR, Abrams EJ, et al. Use of a Comprehensive HIV Care Cascade for Evaluating HIV Program Performance: Findings From 4 Sub-Saharan African Countries. *J Acquir Immune Defic Syndr*. 2015;70(2):e44-51

(C&T) staff to track patients who miss appointments. However, the HIV Patients' appointment and tracking system does not function in isolation. In order to further address the gaps in the HIV continuum of care, patient referrals at different service delivery points within and outside the facility also need to be strengthened. In Tanzania, HIV patients are referred to care and treatment clinics from the HIV testing and Counselling (HTC). This system creates linkages within various units of the health facility and between the community and the health facility providing the service. Currently, it is unknown how effective these systems are operating at different points of services.

At the community level, linkages are promoted by various factors including creation of community awareness on the available services, motivated staff with positive attitudes, ongoing capacity building of outreach workers and most importantly the creation of institutional mechanisms locally to facilitate linkages⁶. Among the available services are PLHIV support groups including post-test clubs, legal services, youth clubs and groups that promote income generation. PLHIV support groups can play an important role in supporting linkage of HIV+ people into care, in addition to providing emotional support to HIV infected and non-infected individuals and promoting prevention messages.

Post- test clubs are comprised of people who have undergone HIV testing and counselling and are HIV positive and HIV negative⁷. These clubs offer a forum to promote positive behavior and messages as well as to increase knowledge and demand for support among the group members including care and support services. Post- test clubs formation and participation is promoted nationwide, but there are no clear procedural or processes that have been documented that these groups follow in their formation. In addition, there is limited information regarding their leadership structures, management of daily activities and the support system that enables these groups to be effective.

1.2 Rationale of the Assessment

Since the inception of the patient appointment and tracking system in 2012, there has been no assessment to determine how effective the system is functioning and if it has led to a decrease of loss to follow up (LTFU) among HIV patients. ART and PMTCT implementing partners in Tanzania still experience high levels of LTFU due to, among other reasons, unclear tracking system of patient identities and the existence of manual and electronic systems at the HTC and care and treatment units respectively. Some other reasons for the high levels of LTFU are higher number of testing units compared to Care and treatment units and transport barriers⁸. Experiences gathered in the Site Improvement

⁶ http://ovcsupport.net/wp-content/uploads/Documents/Building_Linkages_and_Referrals_a_step_towards_sustainability_Alliance_Indias_Experience_1.pdf

⁷ http://ovcsupport.net/wp-content/uploads/Documents/Building_Linkages_and_Referrals_a_step_towards_sustainability_Alliance_Indias_Experience_1.pdf

⁸ <http://jiasociety.biomedcentral.com/articles/10.1186/1758-2652-12-31>

Monitoring Visits (SIMS) by I-TECH, showed that the referral from HTC to C & T unit was 90% effective for the units which were both offering services in the same health facility. From SIMS visit conducted in 2014 in Morogoro, it was found challenging to track patients opting to get care and treatment outside the testing facility. However, this finding cannot be generalized given the limitation of the sources of information.

MOHCDGEC/NACP have undergone several efforts in reducing LTFU including better implementation of patient appointment and tracking registers by orienting key stakeholders including Regional AIDS Control Coordinators (RACCs), District AIDS Control Coordinators (DACCs), Care and Treatment Coordinator (CTC) in-charge, District Home Based Care Coordinators (DHBCCOs), Regional Home Based Care Coordinators (RHBCCOs), Regional Reproductive and Child Health Care Coordinators (RCHCCOs) and the District Reproductive and Child Health Coordinators (DRCHCOs) in some regions. In addition they have provided on job training of mentors in 20 districts in 2016 and through encouraged implementing partners to undertake mentorship of the HCWs using the registers. The trained mentors' role is to assist HCW to correctly fill-out appointment and tracking registers. The remaining districts were supplied only with tools and guidelines documents for self-orientation and learning on how to implement the system. The MOHCDGEC/NACP in collaboration with I-TECH conducted an assessment to explore the efficacy of the tracking systems and challenges faced by those implementing these tracking and linkage registers in high and low functioning districts.

1.3 Potential Use of Assessment Findings

The findings of the assessment are intended to be used by the MOHCDGEC to improve the patient tracking and referral systems by addressing gaps that will be identified in the findings. In discussions with NACP, some of the anticipated improvements might include developing improved models in patient appointment and tracking and procedures on the establishment of the post- test clubs as well as national guidelines. Development of standard operating procedures (SOPs) for health care workers to ensure more effective use of the systems might also be among the anticipated improvements. The assessment will also identify factors that promote usage of the system and those that inhibit effective use of patient tracking as well as referral and linkage. Findings from the assessment pertaining to community support groups and post-test clubs will be used to capture best practices and challenges. In summary, the findings of the assessment will be used to recommend improvements in all systems from the point of testing (HTC) to Care and Treatment and to other service delivery units including the community (HBC), which is ultimately aimed at improving the patient continuum of care.

1.4 Design of the assessment

The assessment design was cross-sectional and descriptive using both qualitative and quantitative approaches to data collection. The assessment was conducted by I-TECH in collaboration with MoHCDGEC/NACP. Three separate systems that support patient

tracking and retention were assessed. The first system is the HIV patient appointment and tracking system within care and treatment facilities. The second system is the referral and linkages implemented by counselling and testing section (HTC) to care and treatment and other services needed by PLHIV. The third system focused on community support groups including post-test clubs for both positive and negative persons within the community. Therefore this assessment is a combination of three different and yet interconnected sub-systems.

1.5 Purpose of the Assessment

The purpose of the assessment was to generate valuable information that will help to improve the patient tracking, referral and linkage systems in order to contribute to the achievement of the national HIV epidemic control targets of 90-90-90⁹.

1.6 Objectives

The specific objectives of the assessment of each of the three sub-systems are:

1.6.1 Care & Treatment

- 1.6.1.2 To determine if the appointment and tracking registers and monthly summaries are completed according to the MOHCDGEC/NACP guidelines.
- 1.6.1.3 Determine the quality of data collected in the appointment and tracking registers and in monthly summaries according to the five data quality standards.
- 1.6.1.4 To document factors that enables or inhibits the use of the appointment and tracking registers or the completion of summaries including the existing best practices.

1.6.2 Referral and Linkage

- 1.6.2.1 To document the process, gaps and best practices for referral and Linkage being followed from HTC to Care and Treatment to additional support services that include its related compliance to the national guidelines or SOP for referral and linkage.
- 1.6.2.2 To document referral and linkage rates including related challenges in facilities with both on-site HTC and C&T and those with HTC services only over the previous three months.

⁹ <http://www.unaids.org/en/resources/documents/2014/90-90-90>

- 1.6.2.3 To document factors that enables or inhibits referral and linkage to care and to other support services.

1.6.3 *Community Support Groups*

- 1.6.3.1 To describe the number, structure and operations of community support groups associated with this facility.
- 1.6.3.2 To determine the influence that community support groups have on adherence
- 1.6.3.3 To document and recommend the best practices for the development of the national guidelines for community support groups including post-test clubs.

SECTION II

Methods and Sampling

2.1 Methods

The assessment used both qualitative and quantitative data techniques. Quantitative data was collected from the two systems (appointment and tracking registers as well as referral and Linkages) that have been generated over the past years. Qualitative data was collected through in-depth interviews conducted with key informants and in focus group discussions. In most cases the qualitative data complements the quantitative data and adds context and detail.

2.2 General Approach

The assessment was led by I-TECH Tanzania in close collaboration with the MoHCDGEC/NACP. Two MOH/NACP staff, were invited to participate in the assessment, and participated in the training for the assessment and pre-testing of the tools. One representative from each region (RACC who is a member of RHMT) and district (DACC who is a member of CHMT) and CHACC were invited to be included in the assessment team with a role of coordinating logistics at the regional and district level respectively. Data collection was supervised by I-TECH M & E team together with 2 clinical staff from I-TECH and two hired assessment assistants with experience in both qualitative and quantitative data collection techniques. The team was sub-divided into 2 sub-teams comprising 6 members in each team (2 I-TECH staff, Assessment assistant, RACC, DACC and CHACC) assigned to collect data in districts sampled as described below. Data analysis and report writing was led by the I-TECH M & E Team with support from the two hired assessment assistants.

2.3 Sampling of the Assessment Sites

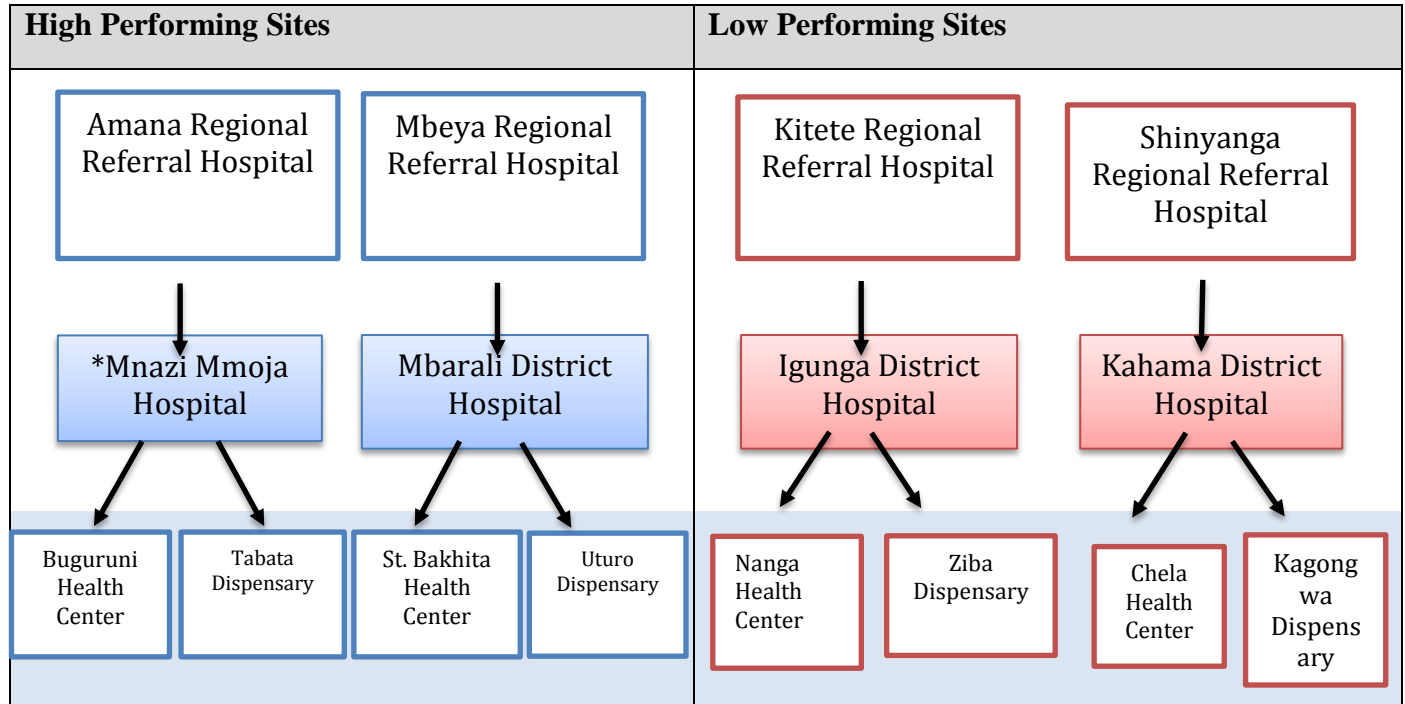
A total of 16 health facilities in four regions were assessed. The assessment focused in regions and districts that were high and low performing in their use of the patient appointment and tracking registers as recommended by MOHCDGEC/NACP. The two high performing regions recommended by the MOHCDGEC/NACP were Dar es Salaam and Mbeya. The two low performing regions recommended were Tabora and Shinyanga. The MOHCDGEC/NACP recommended examining the “high” and “low” performing regions based on supervision reports. From the two groups of regions, districts were selected from two categories; the scale-up saturation¹⁰ and scale-up aggressive¹¹ districts. In total, four districts were selected from the high and low performing regions. To glean information from each level of health care, four types of health facilities were selected from each region: a regional referral hospital, a district hospital, a health Centre facility

¹⁰ 27 districts where PEPFAR will achieve 80% coverage of PLHIV on ART by FY 2017

¹¹ 15 districts where PEPFAR will achieve 80% coverage of PLHIV on ART by FY 2018 or FY 2019

and one low volume dispensary. Figure 1 shows in detail the sampling scheme of the regions, districts and health facilities.

Figure 1: Sampling scheme



*For the purpose of this assessment Mnazi Mmoja Hospital was regarded as District Hospital given the current district hospital (Amana) is now upgraded to Regional Referral Hospital

Individual respondents in each of the 16 health facilities were purposefully selected based on their role in the facilities or in the community support groups.

Before reaching each facility, the study team paid courtesy visits to the regional Medical Officers (RMOs) and District Medical Officers (DMOs) who in turn linked the team with Regional AIDS Control and District Aids Control Coordinators (RACCs) and (DACCs) respectively to inform them of the activity. At the health facility, the Medical Officers in-charges were informed of the study who linked the study teams to the respective staff selected for interviews.

The RACCs and DACCs were interviewed for general information about the status of all three sub-systems for the entire region and district respectively. In addition, the Council HIV and AIDS Control Coordinators (CHACCs) were interviewed regarding information related to community support group. At the facility level, in-charges of C&T, TB, and PMTCT, HTC and STI/VMMC units and HBC focal persons were the primary key informants. The interviewers also observed and triangulated the information as it was collected.

2.4 Data Collection

Data collection process used different tools to different target groups. The following are various details of the tools and cadre of respondents. Table 1 shows the details of the interviews conducted and appendix 1 provides specific tools used for each specific respondent.

2.4.1 Care and Treatment Tools

Appointment, Tracking Registers and Monthly Summary Observation Tool

This tool mainly collected quantitative data, using filled-out registers. The tool was used to verify whether the appointment and tracking registers were in use and used according to the national guidelines. The tool further assessed the use of monthly summary forms and facility performance. This tool was completed at all 16 facilities visited.

Chart Abstraction and Register Comparison Tool

This tool checked the consistency between the appointment register and patient charts. Up to 10 randomly selected CTC IDs were selected from appointment registers and those patient charts were pulled and compared across key data fields. This tool was completed at 15 of 16 facilities.

Appointment and Tracking Interview Guide

This qualitative interview guide explored operational aspects of the register from staff experienced with implementation of the system. The tool gathered opinions from the HCW on the usefulness, challenges of the appointment and tracking system. Versions of the tool were created for the specific cadre asked as key informants for the appointment and tracking system: CTC in charge, DACC, RACC, and PMTCT focal person.

2.4.2 Referral and Linkage Instruments

Referral and Linkage Interview Guide

This tool contained questions for discussions with the cadres involved in referral of patients from C & T to other services within the health facility or outside the health facility. The tool was designed to examine processes involved in referral and linkage and associated challenges. Versions of this tool were prepared for the following cadres: CTC in-charge, CHACC, HBC focal person, HTC focal person, PMTCT focal person, STI_VMMC focal person, and TB in-charge.

Referral and Linkage Comparison Tool

The tool was designed to compare referral data from HTC to the on-site Care and treatment data. A total of 20 patients' identities for the last 90 days were pulled out from HTC and compared to the data at C & T. The tool was used at C & T to find out whether those referred patients were actually reached and received any service. The tool pulled 20 patients' identities from C & T who were referred to HBC to verify with HBC's records whether those patients were received and got services they needed.

2.4.3 Community Support Groups

Community support group Inventory Tool

This tool captured an inventory of the community support groups associated with this facility including their name, number of members, their leader and the contact information of the leader.

Community Support Group Interview Guide Tool for HBC Provider

This tool elicited information from the Home Based Care provider at the health facility, including how they are involved in the formulation of community support groups and the lessons or best practices learned from the community support groups and any challenges encountered and suggestions for overcoming the challenges. A total of 6 interviews were completed using this guide.

Focus Group Discussion Guide for Community Support Members

This was a guide designed to facilitate discussions with the support group members. The discussions were guided by a facilitator and an additional member of the assessment team observed and took notes. Consent was obtained for audio recording. A total of 6 focus groups were conducted using this guide.

2.5 Orientation and Training of Assessment team

The data collection team was oriented to the protocol and trained on the data collection tools on June 21 and 22, 2016. Topics included questions included in the tools, their meaning and sequence, the rationale of the tools according to the protocol, and assessment logistics and ethics.

2.6 Pre-testing of the Tools

The assessment tools were pretested on June 23, 2016 at Kisarawe District Hospital. Each tool was administered as per protocol. During pre-testing, the assessment assistants took note of issues they encountered as the tools were administered. Comprehension and consistency of the tools as well as ease in administering the tools was assessed. The team met the next day on 24th June 2016 and discussed the findings of the pre-test and made necessary corrections to the tools, after which final tools were printed.

2.7 Data Collection

The assessment was conducted simultaneously in the two regions between June 27 and July 12, 2016. A total of 16 health facilities were visited and assessed.

2.8 Data Handling and Analysis

The data collection teams reviewed and verified the notes and tools on a daily basis while in the field during data collection, and kept a list of themes that began to arise from the data. During evening meetings, the team lead checked for quality and the consistency of the data. The teams also identified questions and issues to ask to verify information during the next day of data collection. Once the assessment teams returned from the

field, they held a meeting to consolidate coding and ensure consistency in the coding structure for all qualitative data, and completed data entry, cleaning, and analysis.

All quantitative data was entered into Microsoft Excel. Frequencies were run and summarized for all quantitative data elements for the sixteen facilities. Further, the analysis was disaggregated by urban vs. rural facilities and by type of facility broken down in the following categories; regional referral hospitals, district hospitals, health center and dispensaries as well as by region. Statistical analyses was not performed to explore differences between urban/rural and type of facility, because the sample size was small and therefore the percentages were unstable. Moreover, there were no patterns or directions in the raw data that suggested further disaggregation and comparisons would be useful for the recommendations.

The qualitative data was analyzed and interpreted by code clustered along themes and sub-themes according to the objectives of the assessment. Information was summarized with some key phrases or statements (quotes) and emerging themes were paraphrased as well as sometimes quoted verbatim and integrated into the report as indicated in italics.

SECTION III RESULTS

3.1 Background of the respondents and Health facilities visited.

A total of sixteen health facilities were visited in four regions; Dar es Salaam, Shinyanga, Tabora and Mbeya. Facilities in each region included a regional hospital, a district hospital, a health center and a dispensary. Eleven of the facilities were located in urban settings and five were from rural areas. A full list of facilities visited and assessed, by region, district, and urban/rural, are presented in Table 1.

Table 1: Health Facility Summary

Name of Facility	Region	District	Urban/Rural
Amana Regional Referral Hospital	Dar es Salaam	Ilala	Urban
Buguruni Health Center	Dar es Salaam	Ilala	Urban
Chela Health Center	Shinyanga	Kahama	Rural
Igunga District Hospital	Tabora	Igunga	Urban
Kagongwa Dispensary	Shinyanga	Kahama	Rural
Kahama District Hospital	Shinyanga	Kahama	Urban
Kitete Regional Referral Hospital	Tabora	Tabora	Urban
Mbarali District Hospital	Mbeya	Mbarali	Urban
Mbeya Regional Referral Hospital	Mbeya	Mbeya City	Urban
Mnazi Mmoja Hospital	Dar es Salaam	Ilala	Urban
Nanga Health Center	Tabora	Igunga	Rural
Shinyanga Regional Referral Hospital	Shinyanga	Shinyanga Municipality	Urban
St. Bakhita Health Center	Mbeya	Mbarali	Urban
Tabata Dispensary	Dar es Salaam	Ilala	Urban
Uturo Dispensary	Mbeya	Mbarali	Rural
Ziba Dispensary	Tabora	Igunga	Rural

A total of 92 interviews were conducted across all health facilities visited. The interviews focused on three main areas: Care and Treatment, Referrals and Linkages, and Post-Test Clubs. Table 2 below, shows the cadre of respondents who were drawn from the three focus areas of the assessment.

Table 2: Number and Cadre of respondents including response rate

Cadre of Respondents	Number interviewed	Expected interviews	Response Rate in %
CTC in-Charge	13	16	81
PMTCT focal person	14	16	88
HTC focal person	12	16	75
TB focal person	13	16	81
STI/VMMC	9	16	56
HBC Focal Person	8	16	50
HBC Provider	6	16	38
RACC	3	4	75
DACC	4	4	100
CHACC	4	4	100
FGDs	6	8	75
Total	92	132	70

The low response rate for the HBC focal person and HBC provider (50% and 38% respectively) was because at most of the sites visited for the interviews these two cadres were not found at the health facility; both were at the field for their normal duties. The aggregate response rate of the assessment was 70%.

3.2 Care and Treatment

This section of the results is based on interviews and observations conducted within care and treatment. This part of the assessment focused mainly on the use of the appointment and tracking registers and about quality of data collected. The quality components assessed included correctness and completeness of the registers.

3.2.1 Use and Completeness of Appointment and Tracking Registers

One of the principal objectives of this assessment was to determine the extent to which the appointment tracking and patient register system was being implemented as per MOHCDGEC guidelines. Each facility visited underwent a thorough review of these registers and systems as well as qualitative interviews with key informants.

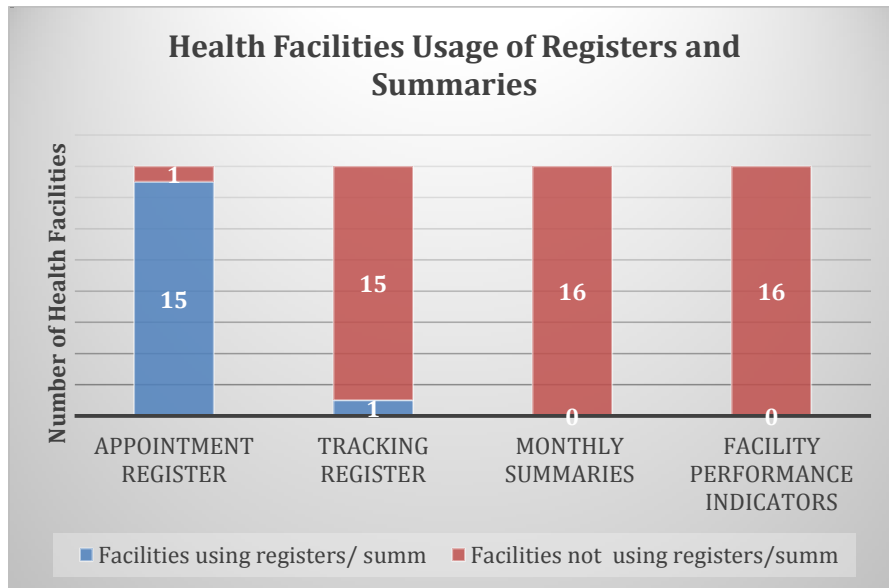
Responses from key informants (CTC in-charge, PMTCT in-charge, RACC and DACC) who use or are familiar with the appointment and tracking registers provided additional context for the quantitative information found below and therefore the quantitative and qualitative results are presented together below.

3.2.2 Use of Appointment and Tracking Registers

All the facilities visited reported current use of the appointment register, and all facilities provided appointment registers for inspection verification. At most of the sites visited, the appointment registers were kept in the registration section in the patient chart room. Current appointment registers were typically in active use at the time of the assessment visits. A supply of new, unfilled appointment registers was noted at most sites.

The overall usage of the appointment register was found to be high with 15/16 (93%) of the facilities actively utilizing the system, whereas use of the tracking register was quite low with only one facility actually using it (Figure 2).

Figure 2: Health Facilities Usage of Registers and Summaries



Just 2 of the 16 sites visited reported using the Facility Register for Tracking Clients with Missed Appointments (the tracking register) and 1 of those 2 sites was using the register incorrectly (as a list of patients LTFU). Therefore we reflected that 1 facility was actually using the register in Figure 2. Several of the sites were using the community tracking register “*Rejesta ya kufuatilia Wagonjwa Wasiofika Kliniki ya Tiba na Matunzo kama ilivyopangwa*” as a substitute, however, that register was not designed to work directly with the appointment register, so the ability to use it to track patients missing appointments was not clear. The most common reasons provided for not using the Facility Register for tracking clients with Missed Appointments were 1) Inadequate supply of blank registers, 2) lack of training on how to properly use the register, 3) A Swahili register “*Rejesta ya kufuatilia Wagonjwa Wasiofika Kliniki ya Tiba na Matunzo kama ilivyopangwa*” is a replacement of the facility register, and the two registers have similar purpose hence is a duplication as a result they opted using the Kiswahili register.

Respondents also said that they had a large supply of the community tracking register (some facilities switched to using this register when they ran out of the Facility Register for Tracking Clients with Missed Appointments), or that they prefer the community register because it is in Swahili.

None of the 16 sites visited had recently completed the Monthly Summary Indicator form (Figure 2). Most were unaware of the form, did not recall ever seeing or being trained on completion of this form. Similarly, none of the sites were able to provide information on recent completion of the Facility Performance monitoring indicators; also some of the

key informants interviewed believed that those indicators were being completed at the district or regional, rather than facility level.

As a result, portions of this assessment specific to the Facility Register for Tracking Clients with Missed Appointments, the Monthly Summary Indicator Form, and the Facility Performance Monitoring Indicators could not be completed.

RACC and DACCs interviewed described their responsibility of ensuring an adequate supply of new registers at the facilities, and all reported that all sites had blank appointment registers available, and all of the sites providing Care and Treatment services are using the appointment register currently. They also noted that the appointment and tracking system has no reporting obligation since it has no reporting format and not included in the quarterly facility-based HIV care/ART reporting form.

Most of the facilities visited were pre-dating the appointment register pages in advance, however most were pre-dating only one or two months in advance, not the three months in advance as directed by the reference Guide. In about half of the appointment registers observed, it was noted that not enough blank pages were pre-dated to accommodate patient appointments for each day. In this case, the sites typically continued entering the appointment information on the back of the appointment register page.

3.2.3 Appointment Tracking and Register Completeness

The appointment tracking and patient register was assessed for three distinct sections to create an aggregate completeness score. These three sections were the scheduled visit section, the post-dated visit section, and the unscheduled visits section.

As shown in Table 3, the sections were filled out an average of 65% (64-66%). The range of completeness for the scheduled visit and post-dated visit section was 45-97%, with the most correctly filled sections being ART status recorded and the lowest completed section being the name recorded correctly. In the unscheduled visit section, the least complete section was the scheduled visit section updated with the visit date.

Table 3: Aggregate Appointment Register completeness

Criteria	Aggregate Completeness score	Range
Scheduled Visit	678/1044	Low 45% (Patient Name correctly recorded) to high 95% (ART status correctly recorded)
Post-dated Visits	404/635	Low 45% (Patient Name correctly recorded) to high 97% (ART status correctly recorded)
Unscheduled Visit	455/650	Low 50% (Unscheduled visit section updated with visit date to high 98% (ART status correctly recorded)

To assess register completeness at the facility level, the assessment team randomly selected 10 patients from 10 randomly selected days in the scheduled visits section of the appointment register. The results of this assessment are presented in Tables 4-6.

Table 4 presents the overall (aggregate) completeness data combining all facilities for the scheduled visit section. Completeness was assessed by seeing if each section was completed as per the national guidelines. The sections of the appointment register that were most often filled correctly and completely were indicating if each patient is on ART, indicating if the patient is enrolled in HBC services, and indicating patient attendance on the day of the appointment. Sections of the register that were filled less completely include recording a CTC unique ID, including the first, middle and last name and recording a time block or visit type.

Table 4: Appointment Register: Scheduled Visit section – Completeness

Criteria	Aggregate completeness score
CTC Unique ID recorded	87/150= 57%
Patient first, middle and last name recorded	67/150 = 45%
Indicated if the patient is on ART	142/150 = 95%
Indicated if the patient is enrolled in Community HBC services	115/150 = 77%
Time Block recorded	80/150 = 53%
Indicated attendance on the day of the appointment	108/150 = 72%
Visit type recorded	79/144 = 55%
Total	678/1044 = 65%

Nearly all facilities abbreviated some of the information entered in the appointment register, most commonly the CTC unique ID and the Name of the CTC patient. The site staff said repeatedly that the column space in the register is inadequate to easily enter the full information for these two columns.

Tables 5 and 6 present the completeness data by facility type and region, respectively. There are no major differences in completeness scores across facility types, although the four dispensaries assessed had a slightly higher completeness score as compared to the hospital or health centers. This could be reflective of the amount of time that staffs have to fill the register and the patient load, which presumably is much lower at the dispensary level.

Table 5: Appointment Register Scheduled Visit Section Completeness by facility type

Criteria	Regional Referral Hospital (n=4)	District Hospitals (n=4)	Health Centers (n=4)	Dispensaries (n=4)
CTC Unique ID recorded	20/40= 50%	20/40= 50%	27/40= 68%	20/30= 67%
Patient first, middle and last name recorded	22/40=55 %	20/40= 50%	11/40= 28%	14/30= 47%
Indicated if the patient is on ART	33/40= 83%	40/40= 100%	40/40=100%	29/30= 97%
Indicated if the patient is enrolled in Community HBC services	29/40= 73%	40/40= 100%	24/40= 60%	22/30= 73%
Time Block recorded	15/40= 38%	20/40= 50%	25/40= 63%	20/30= 67%
Indicated attendance on the day of the appointment	30/40= 75%	26/40= 65%	25/40= 63%	27/30= 90%
Visit type recorded	24/40= 60%	22/38= 58%	16/38= 42%	17/28= 61%
Total	173/280= 62%	188/278= 68%	168/278= 60%	149/208= 72%

Looking at appointment register completeness by region, Dar es Salaam region had the most complete appointment tracking registers (89%), whereas both Mbeya and Shingyanga were 60% complete and Tabora 50% complete (Table 6). These results suggest that Dar es Salaam may be a higher performing region, at least in terms of the appointment tracking register in the scheduled visits section. All other regions performed similarly.

Table 6: Appointment Register Scheduled Visit Section Completeness by region

Criteria	Dar es Salaam (n=4)	Mbeya (n=4)	Tabora (n=4)	Shingyanga (n=4)
CTC Unique ID recorded	37/40= 93%	21/30= 70%	12/40= 30%	17/40= 43%
Patient first, middle and last name recorded	31/40= 78%	24/30= 80%	6/40= 15%	6/40= 15%
Indicated if the patient is on ART	40/40= 100%	30/30 = 100%	40/40= 100%	32/40= 80%
Indicated if the patient is enrolled in Community HBC services	39/40= 98%	20/30= 67%	33/40= 83%	23/40= 58%
Time Block recorded	40/40= 100%	5/30= 17%	5/40= 13%	30/40= 75%
Indicated attendance on the day of the appointment	32/40= 80%	16/30= 53%	26/40= 65%	34/40= 85%
Visit type recorded	24/34= 71%	10/30= 33%	19/40= 48%	26/40= 65%
Total	243/274= 89%	126/210= 60%	141/280= 50%	168/280= 60%

Table 7 presents the overall (aggregate) completeness data combining all facilities for the post-dated visits section. Completeness was assessed by seeing if each section was completed as per the national guidelines. The patterns of filling the register completely for this section are very similar to the scheduled visit section with indicating if each patient is on ART and indicating if the patient is enrolled in HBC services being filled most often.

Table 7: Appointment Register: Post-dated visits – Completeness

Criteria	Aggregate completeness score
CTC Unique ID recorded	63/126 = 50%
Patient first, middle and last name recorded	57/126 = 45%
Indicated if the patient is on ART	122/126 = 97%
Indicated if the patient is enrolled in Community HBC services	95/126 = 75%
Time Block recorded	67/131 = 51%
Total	404/635= 64%

Tables 8 and 9 present the same completeness data information by facility type and region, respectively. As was seen with the results of the scheduled visits section, dispensaries performed higher than health centers and hospitals and the region of Dar es Salaam performed the best.

Table 8: Appointment Register: Post-dated visits – Completeness by facility type

Criteria	Regional Referral Hospitals (n=4)	District Hospitals (n=4)*	Health Centers	Dispensaries (n=4)
CTC Unique ID recorded	14/30= 47%	19/40= 48%	13/34= 38%	17/22= 77%
Patient first, middle and last name recorded	19/30= 63%	19/40= 48%	9/34= 26%	10/22= 45%
Indicated if the patient is on ART	26/30= 87%	40/40=100%	34/34= 100%	22/22= 100%
Indicated if the patient is enrolled in Community HBC services	16/30= 53%	40/40= 100%	24/34= 71%	15/22= 68%
Time Block recorded	11/30= 37%	25/40= 63%	14/34= 41%	17/27= 63%
Total	86/150= 57%	143/200= 72%	94/170= 55%	81/115= 70%

****included Mnazi Mmoja Hospital**

Table 9: Appointment Register: Post-dated visits – Completeness by region

Criteria	Dar es Salaam (n=4)	Mbeya (n=4)	Tabora (n=4)	Shinyanga (n=4)
CTC Unique ID recorded	24/40= 60%	19/20= 95%	12/35= 34%	8/31= 26%
Patient first, middle and last name recorded	31/40= 78%	15/20= 75%	9/35= 26%	2/31= 6%
Indicated if the patient is on ART	40/40= 100%	20/20= 100%	31/35= 89%	31/31= 100%
Indicated if the patient is enrolled in Community HBC services	40/40= 100%	10/20= 50%	30/35= 86%	15/31= 48%
Time Block recorded	39/40= 98%	6/20= 30%	0/40= 0%	22/31= 71%
Total	174/200= 87%	70/100= 70%	82/160= 51%	78/155= 50%

Table 7 above presents the overall (aggregate) completeness data based on 10 randomly selected patients from 10 randomly selected days in the Post-dated visits section of the Appointment register. Tables 11 and 12 present the same completeness data information by facility type and region, respectively.

Table 10 presents the overall (aggregate) completeness data combining all facilities for the unscheduled visits section. Completeness was assessed by seeing if most sections were filled out as per the national guidelines. Three field of the unscheduled visit section were unable to be assessed due to missing and/or incomplete data. These fields included: Date recorded when the patient was expected, reason recorded if the patient is traced or reappearing and date inculcated in the scheduled appointment section.

The patterns of filling the register completely for this section are similar to the scheduled visit and post-dated section with indicating if each patient is on ART and indicating if the patient is enrolled in HBC services being filled most often. We are not able to assess how completely this section was filled overall due to the missing and/or incomplete data. The sections that were able to be assessed were overall 80% complete.

Table 10: Appointment Register: Unscheduled visit – Completeness*

Criteria	Aggregate completeness score
CTC Unique ID recorded	68/130 = 52%
Patient first, middle and last name recorded	65/130 = 50%
Indicated if the patient is on ART	128/130 = 98%
Indicated if the patient is enrolled in Community HBC services	95/130 = 73%
Visit type recorded	99/130 = 76%
Total	455/650 = 70%

**Three field of the unscheduled visit section were unable to be assessed due to missing and/or incomplete data. These fields included: Date recorded when the patient was expected, reason*

recorded if the patient is traced or reappearing and date inculcated in the scheduled appointment section.

For the unscheduled visits section, hospitals (both regional referral and district) and dispensaries filled the register similarly for the fields that were able to be assessed, however, we are unable to draw a strong conclusion regarding this section due to a third of the fields missing from this assessment (Table 10). Similar conclusions are applicable to the comparison by region (Table 12).

Table 11: Appointment Register: Unscheduled Visit – Completeness by facility type

Criteria	Regional Referral Hospitals (n=4)	District Hospitals (n=4)	Health Centers (n=4)	Dispensaries (n=4)
CTC Unique ID recorded	26/40= 65%	24/40= 60%	0/20= 0%	18/30= 60%
Patient first, middle and last name recorded	27/40=68 %	20/40= 50%	5/20= 25%	13/30= 43%
Indicated if the patient is on ART	40/40= 100%	39/40= 98%	19/20 = 95%	30/30= 100%
Indicated if the patient is enrolled in Community HBC services	27/40= 68%	38/40= 95%	8/20= 40%	22/30= 73%
Visit type recorded	31/40= 78%	35/40= 88%	7/20= 35%	26/30= 87%
Total	151/200= 76%	156/200= 78%	39/100= 39%	109/150= 73%

**Three fields of the unscheduled visit section were unable to be assessed due to missing and/or incomplete data. These fields included: Date recorded when the patient was expected, reason recorded if the patient is traced or reappearing and date inculcated in the scheduled appointment section.*

Table 12: Appointment Register: Unscheduled Visit – Completeness by region

Criteria	Dar es Salaam (n=4)	Mbeya (n=4)	Tabora (n=4)	Shinyanga (n=4)
CTC Unique ID recorded	25/40=63 %	17/20= 85%	16/40= 40%	10/30= 33%
Patient first, middle and last name recorded	33/40= 83%	19/20= 95%	9/40= 23%	4/30= 13%
Indicated if the patient is on ART	40/40= 100%	19/20= 95%	39/40= 98%	30/30= 100%
Indicated if the patient is enrolled in Community HBC services	37/40= 93%	15/20= 75%	29/40= 73%	14/30= 47%
Visit type recorded	37/40= 93%	17/20= 85%	23/40= 58%	22/30= 73%
Total	172/200= 86%	87/100= 87%	116/200= 58%	80/150= 53%

**Three fields of the unscheduled visit section were unable to be assessed due to missing and/or incomplete data. These fields included: Date recorded when the patient was expected, reason*

recorded if the patient is traced or reappearing and date inculcated in the scheduled appointment section.

3.2.4 Appointment Tracking Register and Chart Comparison

Table 13 presents the overall (aggregate) completeness data based comparing the Appointment register data from up to 10 randomly selected patients from 10 randomly selected days in the scheduled visits section of the Appointment register to information from the patient's chart (clinic file). Tables 14 and 15 present the same comparison data by facility type and region, respectively. Although at least 10 patient charts from randomly selected CTC unique IDs in the appointment registers were requested, not all facilities could quickly locate the patient charts by CTC unique IDs selected from the Appointment register. This seemed to be due to variety of reasons: The patient chart may have been misfiled, or temporarily located at another location in the facility. We noted a few cases where the CTC Unique ID was entered incorrectly in the appointment register, so the patient chart did not match. In some cases there was not enough time to locate the chart within the time allotted for this section of the assessment, so actual cases compared was fewer than 10 patients per facility.

In addition to looking at how completely the registers were filled, the assessment team also wanted to determine how well the information in the registers matched patient charts. To facilitate this comparison, up to 10 randomly selected CTC IDs were selected from appointment registers and those patient charts were pulled and compared across key data fields.

Overall the charts and the registers most often matched in their recorded appointment dates and their ART status. They match least often in the CTC numbers, names, and reason for the visit (Table 13).

Table 13: Chart Abstraction and Register Comparison

Criteria	Aggregate comparison score
Appointment dates match in chart and register	107/120 = 89%
CTC Unique Ids match in the chart and register	58/120= 48%
Names match in the chart and register	56/120= 47%
ART status matches in the chart and register	115/128 = 90%
Enrollment in HBC matches in the chart and register	75/128 = 59%
Reason for the visit matches	56/120 = 47%
Total	467/736 = 63%

The results of the chart abstraction and register comparison by facility type followed the same pattern as the appointment tracking and patient register completeness results with dispensaries having higher matching scores and likely a lower patient load (Table 14).

Table 14: Chart Abstraction and Register Comparison Tool by facility type

Criteria	Regional Referral Hospitals (n=4)	District Hospitals (n=4)*	Health Centers (n=4)	Dispensaries (n=4)
Appointment dates march in chart and register	27/35= 77%	28/29= 97%	32/36= 89%	20/20= 100%
CTC Unique Ids match in the chart and register	12/35= 34%	18/29= 62%	16/36= 44%	12/20= 60%
Names match in the chart and register	20/35= 57%	16/29= 55%	11/36= 31%	9/20= 45%
ART status matches in the chart and register	33/35= 94%	27/37= 73%	35/36= 97%	20/20= 100%
Enrollment in HBC matches in the chart and register	20/35= 57%	23/37= 62%	15/36= 42%	17/20= 85%
Reason for the visit matches	16/35= 46%	13/29= 45%	10/36= 28%	17/20= 85%
Total	128/210= 61%	125/190=66%	119/216= 55%	95/120= 79%

*included Mnazi Mmoja Hospital

Dar es Salaam and Mbeya performed significantly higher than Tabora and Shinyanga regarding their charts and registers matching (Table 15).

Table 15: Chart Abstraction and Register Comparison Tool by region

Criteria	Dares Salaam (n=4)	Mbeya (n=4)	Tabora (n=4)	Shinyanga (n=4)
Appointment dates march in chart and register	28/32= 88%	26/28= 93%	35/40= 88%	18/20= 90%
CTC Unique Ids match in the chart and register	18/32= 56%	19/28=68%	11/40= 28%	10/20= 50%
Names match in the chart and register	27/32= 84%	16/28= 57%	10/40= 25%	3/20= 15%
ART status matches in the chart and register	31/32= 97%	28/28= 100%	37/40= 93%	19/28= 68%
Enrollment in HBC matches in the chart and register	28/32= 88%	25/28= 89%	22/40= 55%	0/28= 0%
Reason for the visit matches	22/32= 69%	4/28= 14%	14/40= 35%	16/20= 80%
Total	154/192= 80%	118/168= 70%	129/240= 54%	66/136= 49%

Most facilities reported that ART nurses or Clinic receptionists are responsible for filling and updating the appointment registers, although 3 sites said they also use lay counselors

or other less skilled staff for help in entering information in the appointment register. One site described the use of “expert clients” for support at the facility, including entering information in the appointment register. While most sites reported that the duty of entering information into the appointment register is shared among several staff (staff rotate in and out of this duty), three sites reported that there are dedicated staff assigned to this role. One PMTCT in-charge reported that the appointment register is filled by “anyone who is available.”

There was a range of responses when asked how often they check the appointment register for patients who missed their scheduled visit in order to initiate the patient tracking system. Four sites reported they extract the list of patients missing scheduled appointments once or twice weekly (as directed by the reference guide). One facility said they extract the list of missed appointments daily. The remainder reported monthly extraction missed visits, or did not specify. One described their process in detail:

Every day after working hours we usually go through files of clients who didn't show up on their appointment date. We record and keep them aside for follow up. After three days I fill the CTC tracking register. Then I call clients to see what happened to them. I document the conversation in the diary and the agreed day to come for treatment.

3.2.5 Challenges and gaps in using the appointment and tracking system

3.2.5.1 Issues with the Registers

While one site reported a short supply of appointment registers, most had an adequate supply of new registers on site. In contrast, most sites said that they had not received a supply of the Facility Register for Tracking Clients with Missed Appointments for several months or longer, and that forced them to stop using the register entirely or try to use the community tracking register instead.

Several responses described difficulty in using the appointment register as expected:

- The columns for data in the register are too narrow for the amount of information to be entered, particularly the CTC unique ID and the Patient name column. Typically the sites only entered the last 4 to 6 digits of the CTC and first and last patient names into the space provided.
- 20 lines per register page for the “scheduled appointments” section of the appointment register is too few for facilities with many clients—it requires many pages to be pre-filled for each clinic day. With so many pages needed for each day, two or three registers are needed for each month, and this makes checking and updating the registers difficult for staff
- Some sites see a large number of “transfer-in” patients, so the number of lines in the “unscheduled visits” section of the appointment register is inadequate.

- Several sites have added additional columns to the register (or squeezed this information into existing register columns) for age and gender, to help compile data for other reporting requirements

Some patterns of using the registers incorrectly or inconsistently were noted:

- Patient name and CTC unique ID were regularly abbreviated in the Appointment register.
- Two sites were using the appointment register as an “attendance roster”—the information was only entered as patients came in for their visit (they were not pre-entering the information for expected clients in the register).
- Several sites were found to be not regularly updating the Appointment register when a patient came before or after their scheduled visit
- One of the two sites that was using the Facility Register for tracking Clients with Missed appointment (the tracking register), was using the register incorrectly as a lost-to-follow-up list (listing those patients who could not be located, rather than a list of patients who had missed their scheduled appointment by more than 3 days, extracted from the Appointment register).
- While only two sites were found to be using the Facility Register for tracking Clients with Missed appointment (one incorrectly), many sites were using the Community tracking register (Swahili). Since the columns and data recorded in this register do not match the columns in Facility Register for tracking Clients with Missed appointment, it was not clear how the sites were using this register to track clients.

3.2.5.2 Issues related to training and mentoring

While the majority of key informants reported that their facility staff received initial training on implementation of the appointment and tracking system, training-related gaps and issues affecting implementation of the were frequently described by key informants. As two respondents reported:

Very few staffs have had training. Only two (one EN nurse and a doctor) so it is hard for us to do the right thing. We need more training on the appointment and tracking register.

We are not even sure if we know how to use this system

Most CTC in-charge reported that several facility staff had received training on the system, mostly during 2 or 3-day off-site training events. Some reported staff

participating in longer off-site trainings, up to 2 weeks. One CTC in-charge said no staff at the facility had been trained on the system.

Many reported that while there was initial training by the ministry, there was no follow-up by the ministry or refresher training, and new staff must learn the system from on-site staff. Several sites said that on-site training on the system is regularly provided by longer-term staff when new staff are added.

Some DACC and RACC respondents described a system of mentorship and supportive supervision for staff using the registers, while other key informants described inconsistent or inadequate mentoring and supervision:

- *Sometimes the CHMT comes to supervise us. If they find mistakes they teach us.*
- *We also get supportive supervision from CHMT from the district. So if the ones who got trainings and didn't understand some aspect then you are to ask.*
- *Sometimes people from AGPAHI and MKINGA come and provide supportive supervision.*
- *Yes in the region there is huge variations of sites that are using the appointment and tracking registers. Some had staff members trained for the use of the system and other sites did not get exposure to the system*

3.2.5.3 Issue relating to facility capacity and burden of the register system

The majority of the facilities visits cited clinic patient load and staff capacity as factors inhibiting timely and proper completion of the appointment and tracking registers. Several CTCs-in charges said that they lacked adequate staff to manage the work required for the documentation and proper completion of the registers. Several reported that the patient load is too demanding, and that patient needs always come first. Regular updating of the registers was difficult to schedule and manage given the clinical demands at the facility. Typical responses included:

- *(We have) too few staff to manage all the documentation required for the registers. Although the Lay counsellors help in filling out the registers it remains to be a challenge given the fact that are not trained in the use of the registers.*
- *Staff work long to fill and extract name from appointment register, because sometimes we attend more than 90 clients per day*
- *Work load is a challenges, most of the time we get many clients in quickly attending them we say we will fill the registers later on at the evening, but in real sense we don't get time to fill those registers, so we remained with gaps*

- *Their few staffs assigned on a clinic day and their so many people to attend to on a particular clinic day. They still have to fill in the information in the registers so you find that they don't fill in the information correctly because they are stranded with work.*
- *Too much documentation, so much that you fail to fill out the information needed to be filled in every clinic day*

3.3 Referral and Linkage Results

This is the second component that the assessment focused on. The results of this section are about the process of referrals and linkage for patients who are coming from HTC to CTC, CTC to other on-site Departments and other on –Site Departments to CTC and elsewhere. Challenges, suggested best practices and ways to address the identified challenges have been discussed in this section.

3.3.1 HTC to CTC

A total of 12 HTC focal persons were interviewed as part of assessment of the Referral and Linkage system. They were asked about the process and mechanisms for referrals from HTC to CTC, how the referrals are documented, challenges for successful referrals, and examples of best practices. In addition to the HTC unit, several other HIV counseling and testing points of service within the facility were identified by the HTC focal persons interviewed. Most commonly mentioned were RCH, OPD, Lab, IPD, and PMTCT (4 and Pediatrics (4). Other facility sites where HIV testing is offered mentioned more than once included Family planning, CTC, TB, Surgery, Labor & Delivery, VMMC, and HBCT.

Asked how they receive reports from each of these HIV testing sites at their facilities, the most common response (reported by 6 of 14) was that they themselves (the HTC focal person) gather the data from each unit directly, on a regular basis—daily, weekly, or monthly. Three responded that the units send a monthly report. Two said they use register books, and 2 reported that the PITC-in-charge is responsible for gathering reports from the units in the facility that provide HTC. One said they use the national referral form, and one said they have no system in place for reporting on testing done at other units.

The HBC focal persons were asked to describe how clients are referred from their unit to other services. All (8) responded that they use a referral form of some type, either a standard form or a slip with directions. Four responded that they actively escort the client to CTC. Three of the interviewees described counseling the client before the referral is made.

First we use referral forms, but health workers escort client to CTC with a written referral form.

In the past we used to refer clients using referral forms but of recent from 2016 there is no those referral forms.

Currently we send the patients to other unit through explaining to them.

CTC is within the building therefore I always tell the clients to go to the relevant room. This is also applied if we refer clients to other departments rather than CTC, we don't use national referral form we just ask nurse to escort him or her to the referred unit.

From the Lab the patient is given a referral form to HTC on a clinic day. Currently, no referral forms and hence they use normal piece of paper to notify clients for attending the clinic.

When they were asked about how they receive feedback from these referrals, the HTC focal persons gave a range of responses, from no system to informal system to feedback slips to staff confirmation that the referral was completed. Most commonly described (5) was confirmed by the feedback section of the referral form. Three responded that they get feedback by checking the register at CTC (or other unit referred to). Two respondents said they follow up with the other unit on each referral made. Other descriptions of feedback mechanisms included escort confirmation (2), VTC-in-charge confirmation, and patient report. Several responded that there is no reliable feedback system for referrals made to services outside the facility. Sample excerpts from the interviews include:

In theory, the feedback is given through having the second part of the referral form cut and send back to the initiator of the referral. But of now no feedback are given. In year 2010, there were some referral forms which were returned from CTC.

At the end of clinic time HTC in charge goes to CTC with a counter book (HTC informal register) to verify if referred client was enrolled that day. If clients were enrolled HTC in charge will find CTC2 and therefore the enrollment is complete and client now has CTC ID unique number. All information found in CTC2 then will be transferred to the HTC counter book such as client's contact address, cell leader and all information that are linked to that client.

For within health facility, we have monthly meeting all departments that involve HIV. We discuss the number of clients tested and the number of new client at CTC to compare.

I go and verify in the CTC register book if my client was received and get treatment

3.3.1.1 Referral and Linkage rates

As part of the assessment of the referral and linkage system, records from referral and linkage from HTC to the on-site C&T facility were requested and compared to records for all C&T patients from the last 90 days that were referred. The

assessment team attempted to collect data on referral and linkage from HTC to C&T from each of the 16 sites visited. Out of all the sites, only 6 sites were able to produce data on referral and linkage. The rest of the sites had no data to allow tracking of patients from HTC to CTC. Some of the reasons reported for not having data included various and differing systems in use at HTC and CTC of referring patients and provision of feedback once the patients gets the service at the CTC. For example, at the HTC a unique identifier, (usually a number) is given to the client and becomes an identifier. However, at the CTC other identifiers, such as a CTC number is given to the client and the name is added, but both of these identifiers are not reflected in the feedback form that is supposed to be sent back to HTC. Table 16 below reflects the referral and linkage rates for the sites that were able to produce referral and linkage data.

Table 16: Referral and Linkage Comparison table for HTC and CTC

Name of the site	Score	Percentage
Amana RHH	6/6	100%
Mbeya RRH	3/10	30%
Kahama TC Hospital	6/10	60%
St. Bhakita Dispensary	9/10	90%
Tabata Dispensary	5/10	90%
Buguruni Dispensary	6/6	100%
Aggregate Average	35/52	67%

The above table shows that Amana and Buguruni sites (both are in Dar es Salaam region) scored 100 percent of for the six files that were assessed (data for other 4 files were not available). The aggregate average for the successful referral for the six sites was 67%.

3.3.1.2. Challenges related to referrals and Linkage from HTC to C&T

HTC focal persons were asked about challenges to the referral and linkage system. The challenge of getting reliable feedback on referrals was by far the most common described, mentioned by all respondents. Also described was Lack of communication between HTC and CTC when referral is made outside health facility, insufficient health worker to accompany patients from HTC to CTC, and delays in initiating treatment when referral as made, due to staff or equipment shortages at the facility.

The major challenge is that it is difficult to prove that the referred client reached the CTC. Especially when you do not get the feedback form returned.

There is no challenge here, but if you don't escort client might not go to CTC and this is happening because when they reach there they want to get drugs only. If they are told that they will be given health education only the next day they don't come back.

When then asked about specific factors related to the challenge of referral feedback, the HTC focal persons described several issues. Several reported that the printed referral forms are chronically out of stock, so they must improvise with handmade paper slips. Several also reported that even though the forms are used, the slips are not returned from CTC or the unit referred to. Some said they don't have enough staff to provide escorts for each referral made. Several cited the lack of a referral feedback system for referrals outside the facility. Other factors that were described included lack of client follow-through on the referral, unreliable information from the client, and stigma.

Some clients do not go to the referred CTC

The feedback forms are not returned.

CD4 testing done elsewhere by using CTC1 card. Patients do not want to go outside the facility they used to. So testing CD4 outside the health facility makes clients to get lost

Clients who opt to take referral outside this health facility, it is difficult to get feedbacks of their referral.

Within the health facility if clients are not escorted they don't go to the referred department and therefore we don't get feedback.

3.3.1.3. Best practices related to Referral and Linkage between HTC and C&T.

Respondents were asked to describe best practices in referral and linkage--what processes work well in their facility. Physically escorting clients to the unit was commonly described as a best practice (5 mentions). Other best practices identified included adequate supply of referral forms, not making clients wait to be seen at other units, designating a point person for following up on referral completions, offering all services under one roof, and increasing staff motivation by showing patient progress—highlighting that successful referrals contribute to treatment adherence and good patient outcomes, something that most HCW will find motivating.

Our system of escorting client to the referred departments is very good. It helps us not to lose our clients and at the end of the day we have many clients.

This process of escorting clients to referred departments it bring comfort to them, they feel that Using focal person (peers) works better for this system, this helps to take client from one point to another and get feedback

*PMTCT works better since all services are provided at the same roof.
The system helps to identify HIV patients and observe their progress.
It creates good relationship between patients and health worker.*

3.3.1.4. Suggested improvements related to Referral and Linkage between HTC and C&T

When asked what processes related to referral and linkage need to be improved, the HTC focal persons most often cited the system communication between HTC and CTC as needing to be strengthened. Several also mentioned the need to have a system to track referrals made to outside facilities. Other areas for improvement that were described included more and better trained staff, a better system for ensuring that the feedback forms are completed and properly maintained, increasing the number of places where CD-4 testing is available. Excerpts from the interviews on needed improvements included:

Communication between health workers should be improved. I wish if MOH would provide phone to HTC in charge so that I call the health facility I referred my client to ask for feedback and make sure that clients reached there.

Human resource also should be added, as I said before that here we have this policy of taking client hand to hand to the place that you have referred, therefore more staff are needed to help this.

Keeping feedback referral forms needs great improvement. They should be filed properly.

Introduce CD4 testing services at the health facility to reduce those patients refusing to go elsewhere for CD4 testing.

The feedback part of referral form should include a section to write CTC unique ID number

Communication should be improved between HTC and CTC. We don't have money to buy airtime confirming if your client has reached the referred service so that we get feedback.

3.3.2 CTC to other on-site Departments

The assessment attempted to assess how referrals and linkage of HIV patients was being conducted and documented to promote continuum of care. This is in addition to referrals and linkages from HTC to CTC as explained above. To get this information interviews were conducted to CTC in-charges (13) to get their views and opinion on how they refer and link patients to other on-site department and at the same time how they receive patients from other departments (as perceived by CTC in-charges). Documentation of this process was one of the focuses of the interviews.

From the interviews conducted to the CTC in-charges it was clear that referrals and linkage of patients from CTC to other departments frequently happens. This is due to the fact that patients who visit the CTC have various medical and non-medical needs. Some of the patients who attend CTC with some medical needs besides ART related needs are referred to other departments where those services are provided. In addition if a client comes and found pregnant, enrollment is done at the CTC and then referred to RCH with all documentation to allow subsequent visits to be attended at RCH. However, there was no clear process that was explained that is being followed to refer those patients as cited by some of these excerpts from respondents:

No special form to facilitate referrals from CTC to other departments, we use prescription book and ask the patient to go to the other unit where the required service is provided.

Referral forms are used only when the patients is shifting the treatment services to other health facility.

We use prescriptions' book and ask patients verbally to go to other departments in case they need other services.

If pregnant mother attends CTC, enrollment is done at the CTC then linked to RCH with all the documents.

Information on referrals from other departments to CTC was elicited also to assess the process including documentation available at the CTC as evidence of successful referrals. The respondents admitted that the referrals are made, but usually are verbal rather than being on paper (referral forms). Others said, even though some of the referrals are received from other departments such referrals miss some important identifiers which poses difficult to track successful referral. Some of the respondents said:

They use referral forms, but in many cases they are referred verbally from other departments to the CTC.

We receive referrals from other departments such as Laboratory and OPD and VCT departments but they come along with referral forms not filled out with ID, a name even age which poses a challenge on how to track them.

The respondents could not describe clearly how the referrals from CTC to other departments and from other department to CTC are documented. They showed a concern that they do not get feedback on most of the referrals that are being made be it verbal or on paper from CTC to other departments. Such concerns were exemplified by the following excerpts:

We use referral forms but not all are returning feedback on the successful referral. Currently, the forms are out of order they use prescriptions card to refer patients to other department within the health facility.

Clients from CTC normally are linked to HBC in case are lost to follow-up or missed appointment. If they need other services they are given a referral form, but they never bring any feedback to the CTC.

Yes referrals are sent to other departments for the services that are required. But, the feedback is not always sent back and no evidence shown that there was a feedback.

3.3.3 Other on –Site Departments to CTC and elsewhere

Interviews were also conducted from other department to elicit information on how they refer HIV patients to CTC and to other units to seed services they need for continuum of care. The interviews conducted included in-charges of TB units (13), STI/VMMC (7) and PMTCT (14). The aim of such interviews was to document referrals and linkages between different services within the continuum of HIV and AIDS care at the same time Identify gaps in the referral system.

Respondents from these departments were asked the types of documentation they have on referrals from their departments to other units. Responses included using interdepartmental referral forms, others said they escort physically. From the TB section respondents most of the respondents said they do not refer but they provide HIV related services at the unit. Some of the excerpts support these arguments:

We usually do all the procedures here at our department. If the patient is found to have TB and tested positive for HIV then we start the treatment here at our department. This patient will already have the CTC number because when the patient is tested positive, we go to CTC and take their register. We fill in the patient's information and provide a card and the CTC number to the patient. Then the patient will continue with treatment here at our department for six months then afterwards we will transfer this patient to CTC using their file and escort.

If client finishes the Anti TB drugs, and is HIV positive we refer him or her to CTC unit. We use referral form for such kind of cases, but currently we don't have referral forms. Alternatively we use CTC2 to refer clients to CTC.

We have inter departmental referral forms (National referral form)

We use referral and we escort client to the referred department

For CTC we normally refer client and take him/her hand to hand to CTC. We have medical attendant at CTC in charge of this thing.

We don't use referral forms from one department to the next but only when patient is transferring to another facility or district.

When respondents were interviewed to cite some reasons for unsuccessful referrals, there were ranges of responses including stigma, privacy issues and feedback documentation due to no-receipt of feedback forms. It was also reported that there still existence of stigma among the community related to HIV. One of the respondents reported that there are a number of facilities that have been increased and are providing care and treatment for HIV but, patients prefer consistently going to the facilities they are used to they avoid going to other places for services because they will be seen by other people they would not want to see them. The following excerpts show some evidence to support those reasons.

I don't get feedback. If I get feedback it is very good it's like a complete health services is provided.

Yes but the challenge is no feedback is returned in writing.

Stigma among community. When client is through with Anti TB and they are HIV positive, they don't want to go to CTC they say we are afraid we will be stigmatized.

The challenge is that you cannot trace if the client went to the unit that was referred to because very few patients return a written feedback.

Most clients do not want to be referred to another unit. If they have started services here they wouldn't want to go to another unit. They are afraid that other people will see them.

No evidence that the patient reached the unit where the referral was made. There was one client who was found positive at VMMC unit in Dec. 2015 and in Jan.2016 and were referred to CTC but after tracking there was no evidence to prove that they were served at the CTC.

There are these clients who do not want to be referred for testing at other department; they want to be tested here while I don't have diagnosis tools.

Clients are missing drugs because the drug dispensing place has no privacy.

Currently there are no referral forms available for documentation. The feedback forms are not returned by clients given referrals. Patients after receiving services they do not see the point to go back to the service provider to present the form given to him/her.

Respondents were further asked how referrals and linkages can be improved. Some of the respondents provided their responses and felt that there should be deliberate efforts to opting using electronic system than manual. The reasons for this option were that the manual system depends on patients' willingness to share back the feedback. Electronic system was felt will be relying on provider without patient being involved in referral process. Some excerpts from respondents support the idea as follows:

I think to make the system work, the manual system will not work any better as it has been a challenge for a long time. Electronic system should be the way to go since you can see what is happening at any point of service.

There is a need to have referral forms available at all time at the facility the facility in order to keep data related to referrals and linkages. Using prescriptions to refer clients tend to misreport the data.

Continuous education which would avoid the confusion that exists due to existence of Kiswahili and English tracking register versions.

3.4 Post-test Club Results

This section of the results is about the third component of the assessment. This Section presents results on the formation and structure of the post-test clubs, group support and function including challenges.

3.4.1 Post-test Club Inventories

An objective of the assessment was to collect an inventory of the post-test clubs available at each site from the HBC focal person. For all sites visited there was no proper inventory of post-test clubs. These groups are formed in the communities without a clear system of keeping an inventory with the HBC focal person. For the sites that had some records of the available post-test, such information on those clubs was reported by some of the PLHIV who were working at the facility. Therefore the number and names of the post- test clubs available were relied on the memory of the PLHIV working at the CTC on voluntary basis. For instance one of the PLHIV managed to list a total number of 12 post-test clubs in Shinyanga, seven in Kahama and two in Igunga district.

3.4.2. Community support group formation, structure, and organization

To assess and describe community support groups, six focus group discussions were held with support groups in four regions. A total of 37 participated across all the focus groups conducted.

Major themes emerging from those groups are presented below.

Several group participants reported that they came to know about the existence of their support group directly from a clinic source, after they found out their HIV status, or after they were enrolled in treatment:

As I am HIV positive, when I came to get treatment here is where I get to know about this.

Information about this group I (learned) when I used to come for treatment (PMTCT) care and treatment.

They learn first at CTC when they go for treatment.

After testing and (we) found we were infected with HIV virus we were advised to come together to form a group for the purpose of assisting each other.

Initially we decided to contribute from our own pocket for opening an account in anticipation that the government would help us. Second, we came together in a group in order to visiting one another in case one of us gets a problem.

There was a lady came here at clinic and told the administration that she need youth with HIV. I volunteer to be a member and we used to meet once per month and it was on Friday. Our meeting was at Msimbazi centre and when we meet we discussed various topics, a session of question and answers concerning HIV.

I have heard about this group when I came to take drugs, I found some members were educating people about this group.

Others reported learning about the support groups directly from other sources, such as community development officers or community organizations:

But also people get information about these groups through social development officers located at the streets and wards. If a person tested HIV positive she might need legal services and some need other services for income generation. Therefore these district social and development officers are the one giving new client the information of these groups and where to start.

Konga is the combination of all post-test clubs, therefore I heard about this in my group. But I joined my group after I have heard from the community. Therefore municipal and other HIV supporters are the one created this thing called KONGA.

Fortunately most of us here are the one who were the first member of this KONGA. TACAIDS initiated these (groups) but at the beginning we had committee of people living with HIV.

CHACC was the one who assisted in motivating different members to form a group.

I have heard (about) this from Msimbazi Center.

Criteria to be a group member included HIV status (positive—the assessment team did not identify any HIV-negative post-test clubs), and for one group, age: *She (group member) is supposed be HIV positive and she must be a mother. And a baby must be tested and found negative.*

I think first a person must be HIV positive, he she must accept that is positive. Therefore he or she will decide to join group with the aim of getting courage and various information about HIV.

The way we started here, it was any one the age that you can take public transport and reach here. Therefore age was one of the criteria.

One of the criteria was age, a youth with experience and capable of sharing ideas to colleague and help them with taking medication and others.

I can say the criteria was age, you must have age between 12 to 24 years.

When discussing how their support group leaders were selected, most groups described a formal or informal consensus-based process:

The day we gathered together, we volunteer ourselves to be leaders.

Most of the groups we propose a chair whom we think is flexible and capable of educating other members and how he makes decision.

We proposed a person who is capable to lead us, but the added compliments a person that is easy to communicate and participate with all group members.

Knowledgeable person, in case there is a chance to represent us so he/she will be comfortable, also a person that is capable to lead discussion his response to some questions and comments were also among the things that we observed before making decision.

This depends on the opinion of the group members and group need, some group set that a chair must have a degree.

For me I was selected say nominated and the nomination was depended on the track record of performance and ability to lead.

Because we leave it members to suggest who is good to be leaders, therefore they are the ones did this.

They proposed us because some of members they are not talkative so they thought of a talkative person.

Others described a more formal process, according to group bylaws or a constitution, and had established criteria for selecting group leaders:

We were told by our coordinator at the facility that in a group we need to have a group leaders, such as chairperson, Secretary and treasurer so we were elected by our colleagues during formulation of the group.

We select leaders by following constitution we agree (on) election Day and vote for our leaders.

It is true we do select leaders following procedures and guidelines that we address during group formulation.

Also in selecting leaders, sometimes we involve social and development officers if you see that our guidelines miss some important part about choosing leaders. They have a format and structures for selecting leaders.

But one of the criteria to be leaders he/she must be HIV positive for the post of Chair, secretary and treasurer. But other post can involve HIV negative people. It depends with their skills they have for the benefit of the group.

The first meeting we agreed that there will be some election to change leaders and we were told that we are there for all life. But we didn't agree leaders should stay how long.

3.4.3 Group Support, activity and function

The focus group participants described a range of outside support/assistance for their group. Some cited support or involvement from the government, NGOs, and other community groups:

For me I have heard it when I was already enrolled in treatment, we were coming here and we were good followers. They took us the seminar and it was sponsored by AMREF and UNICEF. And when we were back we started formulating this group and we were five. We used to meet after every two-week, educate each other and ask our fellows who gave birth to test the baby and if baby reaches two years we leave her and enrolled new members (pregnant with HIV). Later on we heard news that hospital administration was asking if there is a post test group (Mama mwambata) nurses said yes they give us a task to help our fellow mothers to follow up if she didn't show up for treatment. The hospital takes us to the seminar again until now we are going with our mission.

There is AMREF; in some groups they trained people on how to lead the group (leadership training).

Yes, there is organization. Because we are in different places within the district

some are assisted with certain organization while other group will be supported by another organization.

(there is) government support it (is) for all groups but individual groups are seeking help from various organization by writing propose according to their need.

Other responses described a profound lack of outside support for their groups:

Interviewer: *Is there any support from community and community leaders?*

Respondent: *No*

Interviewer: *From district leaders?*

Respondent: *No*

Interviewer: *Any support from community leaders?*

Respondent: *Maybe if we are looking for someone, we start at ward chairperson he will help to show us*

Interviewer: *Any health support you get from the community?*

Respondent: *None.*

Interviewer: *When you were selected were you trained:*

Respondent: *No there was no training provided.*

Interviewer: *Any incentive provided?*

Respondent: *No incentives are provided. We are working on voluntary basis. Initially we were promised that if we create a group we could be assisted. But we were not given any assistance.*

Interviewer: *Were you expecting something when you formed a group?*

Respondent: *Yes, we were expecting assistance from the district especially from social development unit. For us we were been asked to write a proposal that explains the type of needs we would wish to get such as cooking oil, rice, beansbut of late there was no progress on the proposal and nothing came forth.*

First we started with 28 individuals; we were contributing money that was used to help members. Some members said no, how can we HIV patients contribute money to the group we were supposed to get money from HIV negative communities as help. I said let as start on our own the sponsor will find us with something. Some of the members left and few of us continue and unfortunately our treasurer died. Now we have started from the scratch we are only 17

Most of the community groups assessed were engaged in various income-generating activities, some with support or guidance from outside organizations:

World renew (is) involved in (helping) women living with HIV, they train them about VICOBA, small-scale vegetable farming and livestock keeping chickens. MDH, last month they organized a festival, they wanted to see what talents we have. They asked us to bring our products; we sold them during the event. We started to be popular after showing our products at the festival prepared by MDH, we received a lot of orders. But we also sell our products to adult clients. One of our members has this (weaving) talent, she taught us and the manager of this CTC told us that we can sell the products. As a group we are making liquid soap and detergents, these are group project. Individual every member is having his or her own activity for instance some members are employed.

In our group we make tie and die and scarf or “vikoi” and some are employed.

We were making paper bags but now we are no longer.

We make tie and die and livestock keeping and individual every member has his own project.

We are making food and food processing like mango Pico, groundnuts.

We sell our product in various trade affairs and mostly the one which doesn't want us to pay entrance fee. For example nation torch celebrations, world aids day so we are invited by organizers because mostly they know us.

Sometimes we take our product to Nairobi because our sponsors have meetings in Nairobi. We also have shop.

The focus group participants described a range of group discussions and meeting topics, and benefits to group members:

At the Community, because these groups are open to the community, there is no secret if you join these groups. We work together for some activities and at the health facility. And some of them they get information when they go for HIV test that there such kind of groups doing different kind of activities so it is easy for him to join us because he already seen us working at the streets.

The agenda is mainly assisting each other and other community members. We always go to other community members on help explain how HIV is transmitted and how can be prevented. We are trusted and people listens at us.

The benefit that I get from this club, include exchanging ideas with youth who have the same health status, we also we get knowledge on how to live with other people, reminding how to take drugs (ARV).

Also we teach each other about social life, for example how to generate income using our talents, some teach group members on weaving and we expect sometimes later we will be much better.

Meeting people with similar problems also is a benefit to us, because you feel that you are not alone.

But most of the time we help each other as HIV positive members. Also sometime HIV positive person might find herself/himself stigmatized or segregated. He gets information that there is a group of people living with HIV he gets hope of living happy and new vision. He may start to work, do business and looking for money.

3.4.4 Challenges related to Community Support Groups

When asked to describe the challenges of the community support groups, most responses fell into two broad categories: describing the challenges the group faces (group management, support, functioning, and perceptions of their activity from the outside) and challenges they face individually or collectively as HIV-positive people, such as stigma and discrimination.

Respondents cited the following types of challenges facing the group as a whole:

There are problems within a group--members believe that we have given a fund from organizations because they say why do we want this group to exist. They think we use them to get money.

Another challenge is that when we tell them to pay contribution for income generation they don't believe in us, their perception is that we use them to get money from various organizations.

People believe that things to do with HIV have money. In our group we pay contribution after every two weeks. We expect after sometimes we will use it to start businesses.

The main challenges are that we always contribute small amounts and open up a joint account with the bank for the purpose of starting up a small income generating activities. But since we do not get any assistance from the district or from any interested implementing partner, we end up staying for a long time without activating the account so as a result we lose the contributions in the form of bank interest. Others said, It is better we spend the small amount we have to buy fruits to improve our health instead of contributing with no support.

The challenge that we come across with is when we want to register the new group, there is a lot of procedures to go through before registration. They will ask you to bring constitution and sometimes they will reject your constitution.

Also we have this challenge of paying annual fees, we don't manage at the end the group broke.

The group that was composed of HIV-positive youth described challenges particular to their group:

The challenge we face here is discipline. I have to use extra skills to convince youth to come. Some of the parents didn't know about the club ethics, they thought it is just club that may lead their children to the wrong path. But one day we made an initiative to tell them what it is and how it operate now they are fine with it.

Many kids would like to join club but their parents restrict them... that is why we decided to come here and educate parents of what club is and what exactly we are doing, here at the clinic.

They interpreted this in a wrong way, they thought of adult entertainment. After sensitizing and telling them what it is now they are coming and participate with us.

The challenge is misunderstanding between members, and this happen if we accept a person who is HIV negative because we don't chase away people if you are negative you are welcome. But they sometime don't go along with us due to different reasons.

The challenges described relating to individual members of the support group largely were related to stigma and discrimination:

Stigma also is the challenge to most of the group therefore some people do not advert a group as a group of people with HIV.

For my experience it was different, when I was working to start my group I didn't get support from street leaders but what I got was stigma. Because I just introduced to them that I am HIV positive and I am looking for other people with my status so that we can help each other. Frankly speaking I was stigmatized and since then I was segregated and stigmatized in the end I moved my group to another ward.

In my experience I was stigmatized, when I was tested I was still to my husband and when I come back home most of the people I lived with me at my mother's place they were saying that I was divorced because of my health status, therefore when there is any social event maybe I want to help in cooking you will hear are saying no do not cook you are sick. It was bad experience for me.

We observed this challenge of stigma and lack of good services at some health facility, I was a silent observer I wore Nikab (Islamic cloth that cover face) I

stayed outside, but I did this after I have heard that people are stigmatized by health workers and sometime insulted. I stayed outside the health facility and I observed with my two eyes the way people were insulted and stigmatized. We were with SIKIKA organization, and from there we went to their director. The director was not ready to talk to us because he thought that I am a reporter, he denied but we show him our evidence and tell him that our fellow members should not treated badly. After this conversation if he will report anything bad we will take to the law. Therefore stigma and bad behaviour of health workers towards HIV clients take place in the hospitals and these are few cases but they are several cases we come across.

The focus group respondents also told how the support groups helped them deal with or overcome the challenges of stigma and discrimination:

Ok, the first thing that helps me to overcome these challenges is individual awareness, and I have accepted my health status. Therefore this is the most important weapon to fight against challenges that come against me. Also participating in various meetings presenting our activities and my health status also has helped to overcome challenges and stigma, because if you create self-stigma then others will be ease to stigmatize you.

The first thing is self-awareness and acceptance of the health status, but also to provide education to the community because our community doesn't have appropriate knowledge about HIV. Therefore as group we are taking our part by taking appropriate knowledge to the community so that they can be aware of what HIV is.

Actually as what my fellow said, I cane very far with these challenges because like past 20 years ago everyone was thinking that I will bury my body any time soon or next week. My all friends and relative thought that they will bury me as soon as possible but fortunately I am still here. But the most challenge I come across with is losing all my friends. Because most of them had a notion that I will die soon. Later on I started to see things are in good position, I believe in Biblical word that "Although you are passing through difficult life you will never die, you will live.

I wanted to add something here. Now days the way we have this (support group) network we find out that we have a big family. Sometimes if you have any problem your fellow members would take care (of you) from the beginning to the end.

3.4.5 Support requested for Community Support Groups

Finally, the focus group respondents were asked what type of support they needed, from the MOH or others, to help their members, and to succeed in their mission:

They should help us with entrepreneurship knowledge so that we handle our life without depending on the government.

Addressing the challenges alone may not be possible. It is only possible if we are assisted or helped by others such as someone who holds you a hand for a support short of that, it will not be possible.

We are still needed by the nation; the government should try to develop us, such as supporting us with nutritional food. Food is necessary; other places you find other HIV positive people do get Beans, honey, rice etc. But here we do not get anything to the extent (we are asking) what kind of HIV have we contracted that is making us not getting any assistance like others? It really demotivates. Why other places when PLHA go for drug refill they get also food?

Others do get such assistance such as food, from NGOs that are providing such assistance. Even in Mtwara, I saw people getting food. This can motivate patient taking drugs because others do not have the ability to get food. Some of the missed appointment is caused by many people going to work first where they can earn a pay which in turn will enable them buy food. So if you provide food at the clinic there will be improvement in attendance in the health facilities to get medication.

The other thing is incentive; here at the facility. We are working the health facility for the purpose of motivating patients who are coming for services. So since I am also having HIV, we become more easily approached by fellow patients who are in need of services at the facility. So we help our colleagues. The support while working the facility we do get from AGPAHI.

First the government should help us on following our fellow clients and retain them in the treatment. But we have heard that, the Ministry has a plan to employ four levers to provide these services to the community, we don't have form four education but we know how to handle things in better way because we have a lot of experience, this news has discouraged us. They should consider us with our experience. Also VICOBA should be improved so that to help positive HIV person to solve small family problem.

Ministry of health should continue with improving health services especially for HIV people. We are asking the ministry not to make us buy ARVs later on. As of now we have a challenge of getting drugs for other diseases that are disturbing people with HIV.

My advice to ministry of health will base on their system, without communication between us and ministry the challenge will remain as they are. There are should be a system of reporting from local government to the ministry and ministry to the

local government therefore to track challenges and address them as quick as possible.

For my opinion the ministry of health should first assist these groups and sometimes to formulate help desk. Because we have left some challenges for example CTC system but if we will be trained to follow up some of our fellow clients who are lost. As far as we have experience with this life therefore if we are trained and supported it will be ease for us to track loss to follow up.

SECTION IV

Limitations

4.1 Limitation of the assessment

Some limitations may have affected the achievement of some of the objectives as well as the consistency of some of the results.

Not all of the objectives were fully achieved. The assessment was unable to fully document referral and linkage rates in all facilities and was only able to collect limited referral and linkage data in 6/16 (38%) of facilities. Referral and Linkage data was found to be lacking for numerous reasons cited through the results. In addition, the assessment was unable to document inventories of post-test clubs and/or community support group due to these inventories being non-existent.

There were several notable delays and complications encountered. At times there were concurrent events occurring at the facility on the same day of the assessment. Therefore the assessment in some instances had to be delayed for hours in order to allow other priority activities to take place first (such as the workers verification exercise. In some cases this reduced the amount of time available to complete all parts of the assessment at the facility, and the ability to locate and schedule certain key informants for interviews. At the end of the workers verification exercise some of the staff did not come back to the work station in search of identities and certificates for the exercise. So the assessment missed some of the key respondents. In addition, some of the intended respondents were not present at the time of the assessment due to other assignments despite attempts to ensure the comprehensive list of respondents would be present on the day of the assessment.

SECTION V

DISCUSSION & RECOMMENDATIONS

5.1 Discussion

The findings of the assessment show that none of the sites assessed were fully using the appointment and tracking system as it was designed to maximize retention in care. So it is difficult to describe its effect on treatment retention either way. Although a stated goal of the assessment was to gauge how the main areas of the assessment—the Appointment and Tracking System, the Linkages and Referral System, and community support groups—were contributing to enrollment and retention in care and treatment, and therefore supporting the 90-90-90 goals, the assessment was not able to directly evaluate this question. In each area, data were gathered that were suggestive of the effects of the system on enrollment and retention in care, but data were not available to sufficiently make direct statements of a relationship. It is clear that proper deployment and utilization of the system as it was intended could have a strong impact on retention, but there were no data available to confirm this assumption in the current assessment.

Although the Health facilities visited consistently reported that the national patient appointment and tracking system has helped high volume sites to book patients into appointment blocks to ease patient congestions, quantitative data contradicted this assertion. Findings show that there was limited use of the registers to book patients into various time blocks from all sites visited for both scheduled and for post-dated visits.

All sites visited reported initial training and orientation to the Appointment and tracking system and the associated registers, but lack of refresher training and supportive supervision seemed played a role in the lack of proper and complete use of the registers observed during the assessment. Similarly lack of supervision seemed to contribute to inadequate distribution efforts and use of registers for tracking clients with missed appointments (the tracking register) and the monthly summary forms. The findings showed none of the 16 sites visited were using facility tracking registers and summary forms.

It was clear from the assessment that patient burden at most facilities competed with proper and complete use of the appointment and tracking system. This was evident at high volume sites where more reliance was on the electronic system (CTC2 database) listing of daily appointments, however this system does not currently support automatic updating and producing lists of missed appointments. As a result, the high volume sites ended up not being active in the usage of the appointment and tracking system for reasons of being overwhelmed; at the same time the limitation of the database made it difficult to have an up-to-date system in tracking missed appointments. The only effective use of the database was found to be on tracking Lost to follow-up. The database was found being able to efficiently produce a list of Lost to Follow-up which in all electronic sites they make use of it in liaising with Community based Service providers in tracking them. Those found are returned back to the health facilities for services. Records of such information are entered in a register which is not part of the national patient appointment and tracking system.

The assessment also revealed some anecdotal evidence from the qualitative interviews conducted with the Health Care Workers at the Care and Treatment clinics to show that with prolonged clinic visits for ART refill, patients adhere to the appointment dates than when such visits are scheduled monthly. Patients were said to be busy in some periods of the year. In such busy times of the year most of the patients prefer having a long appointment schedules which in turn they abide to their appointment dates.

Although it was acknowledged by the HCW interviewed that the National Patient and Tracking register system is potentially useful for tracking missed appointment and hence reducing patients who become Lost to Follow-up, but the use of the tracking register for this purpose was found to be minimal. Only 2 (12%) of the 16 sites visited were found using the tracking register to track missed appointment, and one of those two sites was using the register incorrectly. Findings of the assessment also show that the three patient tracking systems available at the health facilities i.e CTC2 database (in some facilities especially in the regional and district hospitals), community-based patient tracking system and the National patient appointment and tracking system cause the HCW get mixed up on how to use these systems effectively. There are tendencies of overlaps of the registers, as a result some of them (National patient appointment and tracking registers) are left and become redundant.

Training on how to use and fill out the National Patient and tracking registers was found to have focused to the HCW, but in reality the findings from the assessment showed that many of the users of the registers in filling out information are non-HCW or less skilled staff. These include volunteers and lay counselors.

Findings also identified challenges regarding referrals and linkages, there were different patient identifiers from the testing points (HTC) to the Care and treatment clinics causing difficulties in tracking successful referrals and linkages. Documentation of the referrals was found to be a major challenge throughout the health facilities visited. Filing of the referrals' feedback forms was one of the areas that need to be strengthened. The feedback forms are left lying on the table at the reception without proper filing which jeopardizes the whole purpose of the essence of the feedback mechanism in ensuring provision of continuum of care.

The post-test clubs are sporadically formed but lack proper guidance on how the groups should be operating for the benefits of all members. The assessment has observed a mixture of all ages and gender in the groups which makes it difficult to address each group's specific needs, although member satisfaction with the groups seemed to be high.

5.2 Recommendations

From the findings of the assessment some of the recommendations of the assessment include:

- 5.2.1 Proper technical assistance (on-site support, mentoring, supportive supervision and quality improvement) could enable the facilities to fully deploy the systems and maximize the potential benefit in HIV treatment enrolment and retention.
- 5.2.2 The gaps identified in the three systems (National Patient tracking and retention, referrals & Linkage and Post-test clubs) are to be addressed in the new HIV Service Delivery Models
- 5.2.3 Revise and standardize forms used for linkages and referral.
- 5.2.4 Revise and strengthen the linkages of National Patient tracking and retention with the community tools in order to maximize resources
- 5.2.5 Formalize and strengthen the post-test clubs in order to maximize its effectiveness in supporting the HIV continuum of care
- 5.2.6 Training needs assessment needs to be conducted in order to have those with hands on responsibility of filling out those registers trained. This will maximize the outcome of the system.
- 5.2.7 Mentoring on the essence of data use at the point of service delivery remains essential. This will help HCW and volunteers realize their efforts in the provision of services at their work place.
- 5.2.8 From the finding there is a discrepancy of information in the training guidelines and the practice on the ground. Therefore there is a need to review the SOP and the training guidelines to line with the realities on the ground as regards to the use of the appointment and tracking registers remains necessary.
- 5.2.9 The CTC2 database needs to be revised to allow automatic updates of the missed appointment rather than waiting until the clients become lost to follow-up.
- 5.2.10 For a successful and effective referrals and linkage tracking system, electronic system needs to be considered for adoption. Manual system seems heavily dependent on the patients to cooperate with HCW for a success which is already too much to the side of patient.

Appendix 1: Tool No 1: Appointment, Tracking Registers and Monthly Summary Observation Tool

Instructions: *This tool is used for filling out information extracted from the appointment and tracking registers through observation in the registers by the data collector.*

Health facility:	Date:
District	
Data collector:	
Code No:	
Level of Health facility _____ (Enter no. as applicable) <i>1=Regional referral Hospital 2= District Hospital 3=Health Centre 4 = Dispensary</i>	

Section 1: General observations for the Appointment Register

N O .	QUESTIONS AND FILTERS	CODING CATEGORIES	Comments
1	Is the appointment register used in this facility?	1. Yes 2. No	
2	Where is the appointment register kept while in use?	<input type="checkbox"/> Registration section <input type="checkbox"/> Exit point <input type="checkbox"/> Other _____	
3	Which days of operation for seeing PLHIV in the week? (Circle days)	Mon Tues Wed Thurs Fri Sat	
4	Has a block appointment system currently been implemented at this facility?	1. Yes 2. No	
5	Is the appointment register pre-dated for three months in the future?	1. Yes 2. No	
6	The pages left blank are they enough to accommodate other patients coming for the scheduled dates?	1. Yes 2. No	

Section 2: a) Scheduled visits section completeness

Instructions: *Please select the Nth patient from 10 randomly selected days the scheduled visits section and fill in the following table according to completeness for each patient by recording “Yes” or “No” in each column.*

	Column A) Is there a CTC Unique ID recorded?	(Column B) Is the first, middle, and last name filled for this patient?	(Column C) Is there a “Y” or “N” indicating the patient is on ART?	(Column D) Is there a “Y”, “N”, “R”, indicating the patient is enrolled in Community HBC services?	(Column E) Is a time block recorded?	(Column F) Is there a Tick indicting attendance on the day of the appointment?	(Column G) Is there a visit type recorded?
Patient 1							
Patient 2							
Patient 3							
Patient 4							
Patient 5							
Patient 6							
Patient 7							
Patient 8							
Patient 9							
Patient 10							
Total “yes” Score	___/___10	___/___10	___/___10	___/___10	___/___10	___/___10	___/___10
Please use this section to record any additional observation on the completeness of the scheduled visits section for this register (observations might include using the wrong coding system, specific ways the register was filled incorrectly, common mistakes)							

Section 2: b) Post-dated visits Completeness

Instructions: *Please select the Nth patient from 3 randomly selected days for the post-dated visits section and fill in the following table according to completeness for each patient by recording “Yes” or “No” in each column.*

	(Column A) Is there a CTC Unique ID recorded?	(Column B) Is the first, middle, and last name filled for this patient?	(Column C) Is there a “Y” or “N” indicating the patient is on ART?	(Column D) Is there a “Y”, “N”, “R”, indicating the patient is enrolled in Community HBC services?	(Column E) Is a time block recorded?
Patient 1					
Patient 2					
Patient 3					
Patient 4					
Patient 5					
Patient 6					
Patient 7					
Patient 8					
Patient 9					
Patient 10					
Total “yes” Score	___/___10	___/___10	___/___10	___/___10	___/___10
Please use this section to record any additional observation on the completeness of the scheduled visits section for this register (observations might include using the wrong coding system, specific ways the register was filled incorrectly, common mistakes)					

Section 3: Unscheduled visits section completeness Instructions: *Please select the Nth patient from 10 randomly selected days of the unscheduled visits section and fill out the following table according to completeness for each patient by recording “Yes” or “No” in each column.*

	(Column A) Is a CTC Unique ID recorded?	(Column B) Is the first, middle, and last name filled for this patient?	(Column C) Is there a “Y” or “N” indicating the patient is on ART?	(Column D) Is there a “Y”, “No” or, “R”, indicating the patient is enrolled in Community HBC services?	(Column E) Is the visit type recorded as “TB”, “RE”, “IP”, “OP”, “OT”, “NEW” or “O”?	(Column F) Is a date recorded when the patient was expected?	(Column G) If the patient is traced or reappearing is a reason recorded (number 1-8)	Check if date is indicated in the scheduled appointment (C olum H or I)
Patient 1								
Patient 2								
Patient 3								
Patient 4								
Patient 5								
Patient 6								
Patient 7								
Patient 8								
Patient 9								
Patient 10								
Total “yes” score	___/___10	___/___10	___/___10	___/___10	___/___10	___/___10 –	___/___10	___/___10

Please use this section to record any additional observation on the completeness of the unscheduled visits section for this register
(observations might include using the wrong coding system, specific ways the register was filled incorrectly, common mistakes)

Section 4: a) Monthly summary form completeness

Instructions: *Please request the monthly summary forms for the past three months when they should have been completed (March, April and May 2016) and fill out the following table for each summary, (Note: if there is no monthly summary form skip and go to section 5)*

March, 2016						
Question	Response		Note any differences and/or discrepancies			
How many Clinic days in the month for this facility?						
Was a monthly summary filled out for March, 2016?	1. Yes 2. No					
Do all the number of the first three Clinic days that patients were seen in the appointment register all filled out in the monthly summary register? <i>(complete the Table below):</i>						
Clinic Day	#Expected today	#who attended Appointment day	#Who attended before date of appointment	#Who attended within 3 days	Number who attended without appointment	Attended during scheduled time block
1	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
2	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
3	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Do the numbers of the first three Clinic days that patients were seen in the appointment register match the monthly summary number? <i>(complete the Table below):</i>						
Clinic Day	#Expected today	#who attended Appointment day	#Who attended before date of appointment	#Who attended within 3 days	Number who attended without appointment	Attended during scheduled time block
1	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
2	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
3	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

April, 2016						
Question	Response		Note any differences and/or discrepancies			
Was a monthly summary filled out for April, 2016?	1. Yes 2. No					
Do all the number of the first three Clinic days that patients were seen in the appointment register all filled out in the monthly summary register? <i>(complete the Table below):</i>						
Clinic Day	#Expected today	#who attended Appointment day	#Who attended before date of appointment	#Who attended within 3 days	Number who attended without appointment	Attended during scheduled time block

1	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
2	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
3	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

Do all the number of the first three Clinic days that patients were seen in the appointment register all **filled out** in the monthly summary register? *(complete the Table below):*

Clinic Day	#Expected today	#who attended Appointment day	#Who attended before date of appointment	#Who attended within 3 days	Number who attended without appointment	Attended during scheduled time block
1	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
2	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
3	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

Do the numbers of the first three Clinic days that patients were seen in the appointment register **match** the monthly summary number? *(complete the Table below):*

Clinic Day	#Expected today	#who attended Appointment day	#Who attended before date of appointment	#Who attended within 3 days	Number who attended without appointment	Attended during scheduled time block
1	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
2	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
3	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

May, 2016						
Question		Response		Note any differences and/or discrepancies		
Was a monthly summary filled out for May, 2016?		1. Yes 2. No				
Do the numbers of the first three Clinic days that patients were seen in the appointment register match the monthly summary number? (<i>complete the Table below</i>):						
Clinic Day	#Expected today	#who attended Appointment day	#Who attended before date of appointment	#Who attended within 3 days	Number who attended without appointment	Attended during scheduled time block

1	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
2	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
3	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No

Section 5: General observations for the Facility Register for Tracking Patients Missing Clinic

N O.	QUESTIONS AND FILTERS	CODING CATEGORIES	Comments
1.	Is the Facility Register for Tracking Patients Missing Clinic available on the day of the visit?	1. Yes 2. No	
2	Are entries in the Facility Register for Tracking Patients Missing Clinic filled out?	1. Yes 2. No	
3	How frequently do you update Facility Register for Tracking Patients Missing Clinic in a month?	-----	

Section 6: Facility Register for Tracking Patients Missing Clinic completeness

Instructions: *Please select the Nth patient from 10 randomly selected days in the tracking clients with missed appointments section and fill in the following table according to completeness for each patient*

	(Column A) Is there an expected date of the patient's last appointment?	(Column B) Is the patient's unique CTC number written?	(Column C) Is the first, middle, and last name filled for this patient?	(Column D) Is there a "Y" or "N" indicating the patient is on ART?	(Column E) Is an action taken recorded by writing a 1-4 in this column?	(Column F) Was tracing indicated by a date?	(Column G) If the tracing process was done (indicated in the previous column), is it indicated who traced with a 1-4?	(Column H) If the patient was traced is an outcome recorded (1-4)?
Patient 1								
Patient 2								
Patient 3								
Patient 4								
Patient 5								
Patient 6								
Patient 7								
Patient 8								
Patient 9								
Patient 10								
Total score	___/___10	___/___10	___/___10	___/___10	___/___10	___/___10	___/___10	___/___10

Please use this section to record any additional observation on the completeness of the scheduled visits section for this register (observations might include using the wrong coding system, specific ways the register was filled incorrectly, common mistakes)

Section 7: Chart Abstraction and Register Comparison Tool.

This section is used to extract information from CTC 2 card (patient file) and compare its correctness with the information entered in the appointment register and the facility register for tracking patients missing clinic.

Part 1: Appointment Register.

Instructions: *Please select the Nth patient from 10 randomly selected days in the appointment register. Ask the facility to pull the 10 files for comparison. Complete the following table. Fill each cell with Y (yes) or N (no).*

	Does the date for the appointment in the chart match the appointment register? (Column F)	Does the CTC Unique ID recorded in the chart match the appointment register? (Column A)	Is the first, middle, and last name recorded in the chart match the appointment register? (Column B)	Does the ART status in the chart match the appointment register? (Column C)	Does enrollment in HBC match the appointment register? (Column D)	Does the reason for the visit from the chart match the appointment register? (Column G)	Note any differences and/or discrepancies
Patient 1							
Patient 2							
Patient 3							
Patient 4							
Patient 5							
Patient 6							
Patient 7							
Patient 8							
Patient 9							
Patient 10							
% “yes” score	____/____ * 100 = ____%	____/____ * 100 = ____%	____/____ * 100 = ____%	____/____ * 100 = ____%	____/____ * 100 = ____%	____/____ * 100 = ____%	

Part 2: Facility register for tracking patients missing clinic.

Instructions: Please select the N^{th} patient from 10 randomly selected days in the facility register for tracking patients missing clinic. Ask the facility to pull the 10 files for comparison. Complete the following table. Fill each cell with Y (yes) or N (no).

	Does the CTC Unique ID recorded in the chart match the facility register for tracking patients missing clinic? (Column B)	Is the first, middle, and last name recorded in the chart match the facility register for tracking patients missing clinic? (Column C)	Does the ART status in the chart match the facility register for tracking patients missing clinic? (Column D)	Does the reason for the missed visit from the chart match the facility register for tracking patients missing clinic? (Column H)	Note any differences and/or discrepancies
Patient 1					
Patient 2					
Patient 3					
Patient 4					
Patient 5					
Patient 6					
Patient 7					
Patient 8					
Patient 9					
Patient 10					
% "yes" score	____/____ * 100 = ____%	____/____ * 100 = ____%	____/____ * 100 = ____%	____/____ * 100 = ____%	

Section 8: Performance Monitoring on Appointment and Tracking System

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	Comments
1	Are indicators calculated monitoring monthly performance available for the previous three months? <i>Please circle "Yes" or "No" for each of the three months.</i>	March 2016 1. Yes 2. No April 2016 1. Yes 2. No May 2016 1. Yes 2. No	

March 2016				
Indicator	Instructions for calculating and actual figures into bracket	Calculated	Calculated correctly	Note any differences and/or discrepancies
Indicator 1: % of patients who attended on or before the day of their scheduled appointment	<p>Add total number of patients who attended ON appointment day (____) + total number of patients attended who attended BEFORE (____)</p> <p>Divide by [Total (Total number EXPECTED in that Month) (____)]</p> <p>Multiply by 100</p>	<p>1. Yes</p> <p>2. No</p>	<p>1. Yes</p> <p>2. No</p>	
Indicator 2: % of patients who attended on, before, or within three days of their scheduled appointment	<p>Add total number of patients who attended on, before, or within three days of their scheduled appointment (____)</p> <p>Divide by [Total number of EXPECTED in that Month] (____)]</p> <p>Multiply by 100</p>	<p>1. Yes</p> <p>2. No</p>	<p>1. Yes</p> <p>2. No</p>	
Indicator 3: % of patients who attended without a scheduled appointment	<p>Take the number of patient's who attended WITHOUT appointment (____)</p> <p>Divide by [Total attended ON appointment Day + Total attended WITOUT Appointment] (____)]</p> <p>Multiply by 100</p>	<p>1. Yes</p> <p>2. No</p>	<p>1. Yes</p> <p>2. No</p>	

April, 2016				
Indicator	Instructions for calculating and actual figures into bracket	Calculated	Calculated correctly	Note any differences and/or discrepancies
Indicator 1: % of patients who attended on or before the day of their scheduled appointment	<p>Add total number of patients who attended ON appointment day (____) + total number of patients attended who attended BEFORE (____)</p> <p>Divide by [Total (Total number EXPECTED in that Month) (____)]</p> <p>Multiply by 100</p>	<p>1. Yes</p> <p>2. No</p>	<p>1. Yes</p> <p>2. No</p>	

April, 2016				
Indicator	Instructions for calculating and actual figures into bracket	Calculated	Calculated correctly	Note any differences and/or discrepancies
Indicator 2: % of patients who attended on, before, or within three days of their scheduled appointment	<p>Add total number of patients who attended on, before, or within three days of their scheduled appointment (____)</p> <p>Divide by [Total number of EXPECTED in that Month] (____)</p> <p>Multiply by 100</p>	<p>1. Yes</p> <p>2. No</p>	<p>1. Yes</p> <p>2. No</p>	
Indicator 3: % of patients who attended without a scheduled appointment	<p>Take the number of patient's who attended WITHOUT appointment (____)</p> <p>Divide by [Total attended ON appointment Day + Total attended WITOUT Appointment] (____)</p> <p>Multiply by 100</p>	<p>1. Yes</p> <p>2. No</p>	<p>1. Yes</p> <p>2. No</p>	

May 2016				
Indicator	Instructions for calculating and actual figures into bracket	Calculated	Calculated correctly	Note any differences and/or discrepancies
Indicator 1: % of patients who attended on or before the day of their scheduled appointment	<p>Add total number of patients who attended OH appointment day (____) + total number of patients attended who attended BEFORE (____)</p> <p>Divide by [Total (Total number EXPECTED in that Month] (____)</p> <p>Multiply by 100</p>	<p>1. Yes</p> <p>2. No</p>	<p>1. Yes</p> <p>2. No</p>	
Indicator 2: % of patients who attended on, before, or within three days of their scheduled appointment	<p>Add total number of patients who attended on, before, or within three days of their scheduled appointment (____)</p> <p>Divide by [Total number of EXPECTED in that Month] (____)</p> <p>Multiply by 100</p>	<p>1. Yes</p> <p>2. No</p>	<p>1. Yes</p> <p>2. No</p>	

May 2016				
Indicator	Instructions for calculating and actual figures into bracket	Calculated	Calculated correctly	Note any differences and/or discrepancies
Indicator 3: % of patients who attended without a scheduled appointment	<p>Take the number of patient's who attended WITHOUT appointment (____)</p> <p>Divide by [Total attended ON appointment Day + Total attended WITOUT Appointment] (____)</p> <p>Multiply by 100</p>	1. Yes 2. No	1. Yes 2. No	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1	<p>Is there a summary from the facility register that tracks missed visits from each of the three months?</p> <p><i>Please circle "Yes" or "No" for each of the three months.</i></p>	March 2016 1. Yes 2. No April 2016 1. Yes 2. No May 2016 1. Yes 2. No	

March 2016				
Indicator	Instructions for calculating	Calculated	Calculated correctly	Note any differences and/or discrepancies
Indicator 4: % of patients traced who were listed as having missed appointments	<p>[Total (Column I)] (____)</p> <p>Divide by [Total (Column H) (____)]</p> <p>Multiply by 100</p>	1. Yes 2. No	1. Yes 2. No	

April, 2016				
Indicator	Instructions for calculating	Calculated	Calculated correctly	Note and differences and/or discrepancies
Indicator 4: % of patients traced who were listed as having missed appointments	<p>[Total (Column I)] (____)</p> <p>Divide by [Total (Column H) (____)]</p> <p>Multiply by 100</p>	1. Yes 2. No	1. Yes 2. No	

May, 2016				
Indicator	Instructions for calculating	Calculated	Calculated correctly	Note any differences and/or discrepancies
Indicator 4: % of patients traced who were listed as having missed appointments	[Total (Column 1)] (____) Divide by [Total (Column H) (____)] Multiply by 100	1. Yes 2. No	1. Yes 2. No	

Appendix 2: Tool No 2: Referral and Linkage Comparison Tool for the in-charge of the HTC Unit

Part 1: Referral and Linkage Interview Guide for the in-charge of the HTC unit (Qualitative part)

Health facility:	Date:
District	
Data collector:	
Code No:	
Level of Health facility _____ <i>(Enter no. as applicable)</i> <i>1=Regional referral Hospital 2= District Hospital 3=Health Centre 4 = Dispensary</i>	

HIV testing points

1. Where else is HTC offered at this health facility?
2. How do you receive reports from those testing sites?

Referral and feedback mechanisms

3. Describe how clients are referred from this facility to other health services?
4. How do you get feedback from referrals made from within and outside the facility?

Challenges

5. What challenges are experienced tracking referral and linkage from HTC to CTC?
6. What challenges are experienced getting referral feedbacks on clients referred?

Best practices

7. What processes do you feel work well for effective referral and linkage?
8. What processes need to be improved?

Part 2: Referral and Linkage Comparison table for HTC and CTC

Instructions: *Request all records from referral and linkage from HTC to the on-site C&T facility and compare records for all patients from the last 90 days that were referred.*

Patient	Referred to C&T	Reported to C&T	C&T provided feedback to HTC on this patient	Information recorded on CTC card	Information recorded on pre-ART/ART register	Barrier to linkage
1.						
2.						
3.						
4.						

5.						
6.						
7.						
8.						
9.						
10.						

Linkage Rate for 3 months from HTC to C&T: ____/____ X100 = ____%

Appendix 3: Tool No 3: Referral and Linkage for HBC

Part 1: Referral and Linkage Interview Guide for the in-charge of the HBC Unit at the facility (qualitative part)

Health facility:	Date:
District	
Data collector:	
Code No:	
Level of Health facility _____ <i>(Enter no. as applicable)</i> <i>1=Regional referral Hospital 2= District Hospital 3=Health Centre 4 = Dispensary</i>	

1. Do you refer patients for other services?
2. How do you refer clients to CTC and how do you receive clients referred from other departments?
3. What documentation is used to track these referral?
4. Describe referral mechanisms used and tools used for receiving feedback?
5. What challenges do you face for completing referrals?
6. What Recommendations do you have for improvements in the referral system?

Part 2: Referral and Linkage Comparison Tool for the in-charge of the HBC Unit

Instructions: Request all records from referral and linkage from HBC to the on-site C&T facility and compare records for all patients from the last 90 days that were referred

Patient	Referred to HBC	Reported to HBC	HBC provided feedback to HTC on this patient	Information recorded on CTC card	Information recorded on pre-ART/ART register	Barrier to linkage
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Linkage Rate for 3 months from CTC to HBC: _____ / _____ X100 = _____ %

Part 3: Post-test club Inventory

Instructions: Fill the names of the Post-test clubs available

	Post-test club name	Point of Contact (Lead)	Number of contact
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Appendix 4: Tool No 4: Appointment and Tracking, Referral and Linkage Interview Guide for Care and Treatment Clinic in-Charge

Instructions: *This is used for interviewing the overall in-charge of the C&T Clinic who is informed of the service delivery processes but not necessarily a hands-on person in filling out the appointment and tracking registers.*

Health facility:	Date:
District	
Data collector:	
Code No:	
Level of Health facility _____ <i>(Enter no. as applicable)</i> <i>1=Regional referral Hospital 2= District Hospital 3=Health Centre 4 = Dispensary</i>	

Awareness of the in-charge of the system:

1. Please describe how your facility uses the appointment and tracking system?
PROBES:

Is the facility currently using the system?

Which staff use system and how

2. Any specific person assigned during each clinic day to facilitate using the appointment and tracking system

Awareness of the Tools _Process operationalization

3. Who fills out the appointment and tracking registers?
4. Are the monthly summary forms available at the facility?
5. Who completes the monthly summary indicator form?
6. Who completes the facility register for tracking clients with missed appointments?
7. Who calculates the facility performance indicators?

Staff training

8. How are key staff trained on using the appointment and tracking system
PROBES:

Did staff attend training outside facility?

Were they trained on the job?

Were staffs mentored by others on the system/supportive supervision?

Data use on the appointment and tracking

9. Describe how your facility uses the data for appointment and tracking system to improve the services

PROBES:

How often does your facility calculate performance indicators

How often does your facility extract names of clients who have not shown up for appointment date?

When does the process of following up patients who get lost starts?

Who makes the follow-up?

How has the appointment and tracking system helped to reduce LTFU?

Challenges on the appointment and tracking registers.

10. Describe challenges or difficulties that your facility encounters in using the appointment and tracking system?

PROBES:

Which particular aspect is most challenging?

Other ART service delivery points (TB, Paediatric)

11. Where else is ART services provided in this hospital or health center?

Referral and Linkage

12. Describe how clients are referred to your CTC facility from other departments
13. Describe how your facility links client to other departments for services
14. Describe how the referral and linkage system could be improved

Appendix 5: Tool No 5: Appointment, Tracking, Referral and Linkage Interview Guide for PMTCT Clinic Nurse

Instructions: *This tool is used for interviewing the Nurse at C&T Clinic who is practically filling out the appointment and tracking registers.*

Health facility:	Date:
District	
Data collector:	
Code No:	
Level of Health facility _____ <i>(Enter no. as applicable)</i> <i>1=Regional referral Hospital 2= District Hospital 3=Health Centre 4 = Dispensary</i>	

Awareness of the in-charge of the system:

1. Please describe how your facility uses the appointment and tracking system?

PROBES:

Is the facility currently using the system?

Which staff use system and how

2. Any specific person assigned during each clinic day to facilitate using the appointment and tracking system

Awareness of the Tools Process operationalization

3. Who fills out the appointment and tracking registers?
4. Are the monthly summary forms available at the facility?
5. Who completes the monthly summary indicator form?
6. Who completes the facility register for tracking clients with missed appointments?
7. Who calculates the facility performance indicators?

Staff training

8. How are key staff trained on using the appointment and tracking system

PROBES:

Did staff attend training outside facility?

Were they trained on the job?

Were staffs mentored by others on the system/supportive supervision?

Data use on the appointment and tracking

9. Describe how your facility uses the data for appointment and tracking system to improve the services

PROBES:

How often does your facility calculate performance indicators

How often does your facility extract names of clients who have not shown up for appointment date?

When does the process of following up patients who get lost starts?

Who makes the follow-up?

How has the appointment and tracking system helped to reduce LTFU?

Challenges on the appointment and tracking registers.

10. Describe challenges or difficulties that your facility encounters in using the appointment and tracking system?

PROBES:

Which particular aspect is most challenging?

Referral and Linkage

11. Describe how clients are referred to your PMTCT facility from other departments
12. Describe how your facility links client to other departments for services
13. Describe how the referral and linkage system could be improved

Appendix 6: Tool No 6 Referral and Linkage Interview Guide for the in-charge of the TB unit

Health facility:	Date:
District	
Data collector:	
Code No:	
Level of Health facility _____ (Enter no. as applicable) <i>1=Regional referral Hospital 2= District Hospital 3=Health Centre 4 = Dispensary</i>	

1. What types of documentation is made for referrals from TB to other departments?
2. What are barriers to consistently documenting referrals to and from other units?
3. Is there a mechanism for getting feedback from referrals made?
4. What challenges are experienced in tracking referrals and linkage?
5. What works well in tracking referrals and linkage in this unit?

Appendix 7: Tool No 7 Referral and Linkage Interview Guide for the in-charge of the STI/VMMC unit

Health facility:	Date:
District	
Data collector:	
Code No:	
Level of Health facility _____ (Enter no. as applicable) <i>1=Regional referral Hospital 2= District Hospital 3=Health Centre 4 = Dispensary</i>	

1. What types of documentation is made for referrals from STI/VMMC to other departments?
2. What are barriers to consistently documenting referrals to and from other department?
3. Is there a mechanism for getting feedback from referrals made?
4. What challenges are experienced in tracking referrals and linkage?
5. What works well in tracking referrals and linkage in this unit?

Appendix 8: Tool 8; Post-test club Interview Guide for HBC Provider

Name of the Person Interviewed: _____

Position: _____

Name of the Interviewer: _____

Facility Name: _____

Date: _____

1. Are there post-test clubs associated with this facility? ☐ Yes ☐ No

1.a If yes, How many _____

2. What is your role in the Post-test club formation?

3. Do you join post-test club meetings? ☐ Yes ☐ No

Instructions: If answer YES to question 4, proceed to questions 5-12

4. What is your role in the post-test club members meetings? When you attend?

5. Are there messages provided to post-test club members from HBC Providers? If so, what are these messages?

6. Are there other topics discussed apart from HIV and AIDS issues?

7. Describe how post-test clubs members are being linked to services in the facilities?

8. What are the best practices that can be learned from post-test clubs?

Appendix 9: Tool No 9; Post-test club Interview Guide –for Post- test Club leaders

Name of the Interviewer: _____

Facility Name: _____

Date: _____

1. How did you become a group leader?
2. What are the criteria to be considered in selecting the group leader?
3. What are the incentives for being group leader?
4. Did you get any training before or after being a group leader?
5. How many group members are there in your post-test club?
6. How often do you meet?
7. Are there specific days or dates that you meet?
8. Is there a specific place where you normally meet?
9. Who convene the meeting?
10. What are the major things/topics discussed during the meetings?
11. Are there other topics discussed apart from HIV and AIDS issues?
12. How can you get clarifications in case you have questions during your meeting?
13. What are the challenges that you face as a group leaders?
14. How do you manage those challenges?
15. What are the challenges to keeping this post-test group active?

Appendix 10: Tool No 10; Focus Group Discussion Guide – Post-test Club Members

1. What prompts a person to join the group?
Probe: where did you hear about the existence of the group?
2. Who convenes the meeting? Do you have leadership in you group?
Probe: How do you select the leader?
Probe: the criteria being considered when choosing the leaders
Probe: the interval of selecting the leadership
Probe: the name of organization that provides support
Probe: what kind of support are you getting?
3. Do you get support from community/village leaders?
Probe: what kind of support are you getting?
4. Probe: health benefits and social benefits
5. 7. What are the challenges that you face to join the group meetings?
Probe: Individual challenges vs. group challenges (What are the challenges the group faces to continue to meet?)
6. Did you experience any challenges when joining the post-test group?
Probe: Challenges and how did you overcome the challenges

Appendix 11: Tool No 11; Discussion guide for Regional AIDS Control Coordinators (RACCs)

Code.....

Region.....

1. Please describe how you ensure that facilities in your region use the appointment and tracking system?
2. Describe how you undertake CSSM on the system in relation to the appointment, tracking, linkage and referral?
3. Is the Availability of tools for the appointment tracking system sufficient for facilities in your region? Why or why not?
4. How many facilities are providing ART services in your region?
5. How many of those facilities providing ART are using the appointment and tracking system?
6. Are there facilities that use the appointment and tracking registers better than the others? If so what could be the reason?
7. How many facilities submitted monthly summary reports for appointment and tracking in May?

Appendix 12: Tool No 12; Interview guide for the District AIDS Control Coordinators (DACCs)

Code.....

District.....

1. Please describe how you ensure that facilities in your district use the appointment and tracking system?
2. Describe how you undertake CSSM on the system in relation to the appointment, tracking, linkage and referral?
3. Is the availability of tools for the appointment tracking system sufficient for facilities in your district? Why or why not?
4. How many facilities are providing ART services in your district?
5. How many of those facilities providing ART are using the appointment and tracking system?
6. Are there facilities that use the appointment and tracking registers better than the others? If so what could be the reason?
7. How many facilities submitted reports in May?

Appendix 13: Tool No 13; Interview guide for the Council HIV and Aids Control Coordinators (CHACCs)

Name.....

District.....

1. Describe how you coordinate various organizations providing HIV care and treatment in your community.
2. What types of referrals and linkages do you facilitate between organizations and support groups in the community?
3. How do you facilitate referrals from the community to HIV care and treatment?
4. What challenges do you face in facilitating effective referrals?
5. How do you think retention in HIV treatment can be improved?