OPERATIONAL GUIDELINES FOR THE IMPLEMENTATION OF THE “TEST AND TREAT” STRATEGY IN CAMEROON

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The Ministry addresses their sincere thanks to WHO and CDC/PEFPAR, for their relentless support and contribution towards the elaboration of this document; whose implementation will contribute to enhance the quality of care and treatment to people living with HIV and improve on their retention to ART in health facilities throughout the national territory.

Their appreciation also goes to National and international consultants, to all participants who contributed to the elaboration, consolidation, validation and production of the guidelines in various workshops.

This guidelines will go a long way to address key issues related to HIV testing, linkage & retention in ART services, patient monitoring, and harmonization of operational practices.
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PART I: GENERAL INFORMATION
I. Context and justification

Ending the AIDS epidemic by 2030 is a Global objective to which the Government of Cameroon has adhered to. Despite the pandemic context, efforts made over the years to fight against AIDS have contributed to the reversal of the epidemic trend. According to reports from EDS 2011, the prevalence of HIV has dropped from 5.5% to 4.3% in the 15 to 49 age group. In 2016, an estimated 585,276 persons lived with HIV and only a third of those patients were on ART (205,382) with a retention rate of 60% at 12 months.

In order to reach the UNAIDS 90-90-90 HIV treatment targets by 2020, that is ensuring that 90% of people living with HIV know their status, 90% of people who know their status are on antiretroviral therapy, and 90% of people on antiretroviral therapy achieve viral suppression, a rapid and effective implementation of the World Health Organization’s (WHO) "Test and Treat" recommendations will require.

It is in this framework that the Minister of Public Health gave new strategic guidelines for Cameroon in 2016 which included; the systematical implementation of HIV testing and counselling at all entry points in health facilities; the implementation of “Test and Treat” strategy for all people living with HIV, the decentralisation of antiretroviral therapy to Medicalized and Integrated health centres, task shifting, the recruitment of psycho-social workers in health facilities for the promotion of HIV testing, linkage/retention, tracking defaulters or lost to follow-up patients, and finally subsidising the cost of the viral load test. The expected impact of the implementation of these strategies will be a reduction of HIV related deaths and new HIV infections by 2020.

Following the launch of the new strategic directions in May 2016, the health system has been facing challenges in its operationalization and monitoring, especially the implementation of “Test and Treat” including information of actors at the national, intermediary and operational levels.

It was therefore necessary to define the operational modalities to implement the new strategies especially the implementation of the “Test and Treat” initiative. The operationalization of this initiative will enhance knowledge and ensure a harmonious implementation throughout the national territory.

The present operational guidelines aims at defining a minimum package of services for all the levels of the health pyramid, and standardise procedure for each type of service to be offered.

A. Objectives of the operational guidelines

- To harmonize the procedures for implementing “Test and Treat” at all levels of the health pyramid, with, all the partners involved in the scheme;
- To maintain the quality of existing services and continuity without service interruption, to render services effectively and efficiently during the transition or post-transition period.

B. Guiding principles of the “Test and Treat” strategy

The guiding principles of the “Test and Treat” strategy are as follows:

- Rigorous implementation of national guidelines;
- Decentralisation of HIV testing and treatment services;
- Task shifting;
- Collaboration of all actors in the implementation;
- Efficient use of available resources;
- Guarantee the quality of information produced;
- Use of information generated for decision making
C. Priority package of interventions for the “Test and Treat” strategy in Cameroon

The main interventions of the “Test and Treat” strategy are the following:

▪ Community mobilisation;
▪ HIV counselling and testing;
▪ Linkage between HIV testing and treatment;
▪ Treatment and care of people living with HIV;
▪ Retention of people living with HIV on ART in the active file;
▪ Cross-cutting or support interventions (commodity management, coordination, monitoring-evaluation).
PART II: OPERATIONAL PROCEDURES FOR THE IMPLEMENTATION OF INTERVENTIONS
I. HIV counselling and Testing

**Important considerations for testing in the context of «Test and Treat»**

Testing for HIV should not be seen merely as a laboratory test but as a broader based strategy consisting of providing appropriate information to the patient through counseling, testing, and linkage to care and treatment.

National recommendations identify five essential components of a testing programme, referred to as the « 5 C »:

- Consent,
- Confidentiality,
- Counselling,
- Correct test results,
- Connexion or linkage to prevention, care and treatment.

1. Community counselling and testing (CCT)

It is offered and done by:

- **Mobile health teams** (advanced strategy) in the framework of mass testing campaigns.

- **Health workers trained** in counselling and testing who screen for HIV within the community, including at home in collaboration with an HIV management health facility.

CCT is practiced out of the traditional health circuit (health facility), in places that are easily accessible to the populations and where they meet. It helps decentralise and de-medicalise HIV counselling and testing.

Community health workers involved in CCT receive an initial training and refresher course of their work. They will subsequently participate in quality assurance programmes and benefit from well-defined supervision program, external quality assurance and periodic evaluation.

2. Provider initiated Counselling and testing (PITC)

All health facilities (hospitals, sub-divisional medical centres, health centres and clinics) provide counselling and testing services at each contact with health care users and at all entry points.

This model of service delivery is reinforced by the Ministerial Circular letter of reference No “**LC No D36-06 / MINSANTE of 25 / 01 / 2016 on routine testing in health facilities”**

3. Patient-Initiated counseling and testing or Voluntary Counseling and Testing (VCT):

The service user creates the demand for HIV counseling and testing, in a health facility or in a community structure that provides this service (CBOs, associations, youth centers, etc......).

4. **Self-Testing**
This is a quick HIV diagnostic test to be performed by individuals at home without external intervention or influence. Currently, this screening strategy is being assessed for feasibility / applicability.

WHO has released new recommendations to assist countries to integrate self-testing in national strategies? Cameroon has not yet adopted this strategy hence it is not yet integrated in the National implementation guidelines.

**Summary Table of Operational Procedures for HIV Counseling and Testing**

<table>
<thead>
<tr>
<th>Where is CT done?</th>
<th>How is CT done?</th>
<th>Who does CT?</th>
<th>Who benefits from CT?</th>
<th>What is use to perform CT?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In the community</strong>: Hot spot, CBO, counselling boxes, CMPJ, schools, cultural, sports or religious gatherings &amp; events, crowds (markets) ...</td>
<td>- Systematically offer the HIV test to all persons seen during community interventions&lt;br&gt;- Educational talks, pre-test counseling, post-test counseling (see 2016 ART Guidelines), linkage / referral to health facility for verification and treatment</td>
<td>- Mobile medical teams&lt;br&gt;- Trained community health workers</td>
<td>- Adults (M&amp;W), children, adolescents&lt;br&gt;- Key populations (MSM, FSWs, prison inmates, ...)&lt;br&gt;- Vulnerable populations (truckers, migrants/ refugees, indigenous populations, ...)&lt;br&gt;- Families of index cases</td>
<td>- Rapid screening tests used in the national algorithm (see Appendix)&lt;br&gt;- Harmonized Monitoring and evaluation tools (log books, registers, referral/ counter-referral forms,</td>
</tr>
<tr>
<td><strong>At home</strong>: Within the framework of family testing and advanced or outreach testing strategy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>All public or private (secular or confessional) health facility and school medical services</strong>&lt;br&gt;- At health facility all entry points: waiting rooms, consultation rooms (outpatient, inpatient wards, ANC, FP, nutritional rehabilitation services, blood bank), vaccination, ASRH or adolescent friendly services, laboratory, waiting rooms for patient caregivers, labour room.</td>
<td>- Systematically offer the HIV test to all persons visiting the health facility, whatever the reason for the visit: Educational talks, pre-test counseling, post-test counseling, linkage / referral to health facility for verification and treatment (see guidelines for care 2016).</td>
<td>- Any health caregiver trained on CT</td>
<td>- Adults (M&amp;W)&lt;br&gt;- Children&lt;br&gt;- Adolescents&lt;br&gt;- Pregnant and Lactating women&lt;br&gt;- Families of index cases</td>
<td>- Rapid screening tests used in the national testing algorithm (see Appendix)&lt;br&gt;- Harmonised Monitoring and evaluation tools (log books, registers, referral/ counter-referral forms,</td>
</tr>
<tr>
<td><strong>In health facilities</strong></td>
<td>- Systematically offer the HIV test to anyone wishing to know their HIV status</td>
<td>- Trained community health workers&lt;br&gt;- Any healthcare worker trained in CT</td>
<td>-- Adults (M&amp;W),&lt;br&gt;- Children,&lt;br&gt;- Adolescents&lt;br&gt;- Pregnant and Lactating women</td>
<td>- Rapid screening tests used in the national testing algorithm (see Appendix)&lt;br&gt;- Harmonised Monitoring and evaluation tools (log books, registers, referral/ counter-referral forms,</td>
</tr>
</tbody>
</table>
5. Special cases

**Case N°1: Adolescent Testing**
- Create friendly adolescent spaces in health facilities and in the communities and offer services tailored to the specific needs of adolescents. *These are spaces adapted in health facilities that offer a safe and friendly environment with adapted educational materials, services packages and convenient opening hours for adolescents which guarantees intimacy and avoidance of stigma.*
- Adolescents under the age of 15 who come for CT must produce a written and signed consent from their parents or legal guardians.
- Adolescents over the age of 15 who come for CT with a clear understanding of the reasons for the test and its implications should be considered "mature minors". It is recommended that a written and signed consent by the adolescent be obtained in this case. If the adolescent is accompanied by a parent or caregiver, the parent or caregiver may be present during the CT session only with their consent.

**Case N°2: HIV Testing in pregnant and lactating women**
- Provide HIV counselling and testing to all pregnant and breastfeeding mothers, to their partners and children with unknown HIV status in antenatal care services (ANC), labour and delivery rooms, post-natal and family planning services;
- Emphasize on the importance attending the 4 ANC;
- Ask the pregnant woman to give birth in a health facility or in the presence of a qualified person;
- Encourage the HIV negative woman to keep their HIV negative status and re-test for HIV 3 months after the first test proactivity HIV prevention;
- Support pregnant women by encouraging them to share their HIV status with their partners/spouses;
- Support pregnant women with respect to fear of rejection to find the most appropriate solutions.
- Sensitize and support pregnant women to bring their partners/spouses and children to ANC (invitations are sent to their partners) for care of the entire family;
- Sensitize partners/spouses on the importance of HIV testing and offer testing to them as early as possible following the first visit.

**Case N°3: Testing of children**
- All children born to HIV-positive mothers should benefit from HIV testing as per the national testing algorithm. All children born to HIV-positive mothers should be followed up to 18 months to determine their final serological status.

In order to capture information on the HIV status of the mother-baby pair, we have to:
- The serological status of the mother and child must be verified at each visit in all services for children (vaccination, nutrition service, hospitalization, paediatric consultation, etc.). If the child’s status is unknown, the test should be performed for the mother and samples collected from the child for early infant diagnosis if the mother is HIV positive.
- The post-natal consultation register of the mother-baby pair (cohort monitoring) must be integrated into the immunization services, as this offers an opportunity for testing of the exposed or infected children.
**Case N° 4: Systematic HIV testing in all high risk populations**

- Systematically test for HIV in all newly diagnosed tuberculosis patient;
- Systematically test for HIV in all patients with viral hepatitis B or C;
- Systematically test for HIV in all patients suffering from other sexually transmissible infections;

NB: Look for signs of suspected tuberculosis (coughing, weight loss, fever, nocturnal sweating) in all HIV+ patients. If one sign is present, confirm tuberculosis with microscopy or GeneXpert.
6. Repeat testing in HIV negative people

<table>
<thead>
<tr>
<th>Places</th>
<th>Is a repeat test recommended?</th>
<th>When to do the repeat test?</th>
<th>Is it recommended to repeat the test afterwards?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prenatal consultation, labour and delivery room, Maternal and child health consultation</td>
<td>Yes</td>
<td>3 months after the previous test</td>
<td>Yes – for every new pregnancy</td>
</tr>
<tr>
<td>Tuberculosis treatment services</td>
<td>No</td>
<td></td>
<td>No – Unless there is a potential new exposure of if the individual is in a high risk category*</td>
</tr>
<tr>
<td>Consultation for STI management</td>
<td>Yes</td>
<td>4 weeks later</td>
<td>Yes – for each new STI, or if the person is in a high risk category*</td>
</tr>
<tr>
<td>Hospitalisation or in patient services</td>
<td>No</td>
<td>–</td>
<td>No – Unless there is a new potential exposure, or if the person is in a high risk category*</td>
</tr>
<tr>
<td>Out patient services</td>
<td>If clinical HIV infection is suspected**</td>
<td>4 weeks later</td>
<td>No – Unless there is a new potential exposure, or if the person is in a high risk category*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Context</th>
<th>Is a repeat test recommended?</th>
<th>When to do the repeat test?</th>
<th>Is it recommended to repeat the test afterwards?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indeterminate status with regards HIV</td>
<td>Yes</td>
<td>Repeat immediately using the same testing algorithm on the same sample</td>
<td>If the results are still unconformable, re-do the test two weeks later; if the results are still unconformable, direct the patient to a higher level of the health system</td>
</tr>
<tr>
<td>Status of partner unknown</td>
<td>Yes (only if new people are involved)</td>
<td>4 weeks later</td>
<td>Once a year – if sexual relations are continuing</td>
</tr>
<tr>
<td>Partner whose HIV status is known*</td>
<td>Yes (only for new patients or clients)</td>
<td>4 weeks later</td>
<td>Once a year – if sexual relations are continuing</td>
</tr>
<tr>
<td>Sex workers*</td>
<td>Yes (only for new patients or clients)</td>
<td>4 weeks later</td>
<td>At least once a year</td>
</tr>
<tr>
<td>Current intravenous drug addicts *</td>
<td>Yes (only for new patients or clients)</td>
<td>4 weeks later</td>
<td>At least once a year</td>
</tr>
<tr>
<td>Men who have sex with men and transgender people</td>
<td>Yes (only for new patients or clients)</td>
<td>4 weeks later</td>
<td>At least once a year</td>
</tr>
<tr>
<td><strong>After sexual violence/rape</strong></td>
<td>Yes, if the baseline HIV test was negative, or if the HIV test result at first contact is negative, or if the HIV status is indeterminate; see the WHO/WLO joint recommendation on post-exposition prophylaxis</td>
<td>4 weeks and 12 weeks later</td>
<td>No</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Professional exposure</strong></td>
<td>Yes, if the baseline HIV test was negative, or if the HIV test result at first contact is negative, or if the HIV status is indeterminate; see the WHO/WLO joint recommendation on post-exposition prophylaxis</td>
<td>4 weeks and 12 weeks later</td>
<td>No</td>
</tr>
<tr>
<td><strong>HIV test results negative over the last 3 months</strong></td>
<td>No</td>
<td>–</td>
<td>No</td>
</tr>
<tr>
<td><strong>No possible exposures to HIV during the last 3 months</strong></td>
<td>No</td>
<td>–</td>
<td>No</td>
</tr>
</tbody>
</table>

*Group with high risk of HIV transmission
**Depends on the HIV prevalence at consultation site, the symptoms presented and the risk factors for that person.


7. Procedures for HIV testing

**Step 1:** Follow the procedures described in the national HIV testing algorithm. (See Appendix 3).

**Step 2:** If the result of step 1 is "positive"
- Make another lab technician to repeat (step 1), using the same sample and without communicating the first result to the second technician.
- If the results of the two technicians agree, i.e. result is "positive", then conclude that the patient is HIV positive

If the results of the two technicians are discordant, collect another sample from the patient on the same day, and repeat steps 1 and 2. If the results of the two technicians are still discordant, refer the patient to a reference health facility

8. Measures to take in case of an “inconclusive” or “invalid” test

- Measures to take in case of an inconclusive or indeterminate rapid HIV test:
  - Repeat the test 3 to 4 weeks later or refer to a reference laboratory if accessible.
- Measures to take in case of invalid rapid HIV test:
  - Repeat the test with the same sample and the same type of test.

9. Tools for HIV testing
➢ For supply of commodities:
  o Physical stock inventory forms
  o Stock cards,
  o Monthly purchase order booklet,
  o Delivery and receipt slip,
  o Commodity usage report form,
  o Register of expired/damaged items.

➢ For the organisation and reporting of HIV testing activities:
  o Medical records of the exposed child;
  o Consultation registers at various entry points (including in laboratory and ANC units);
    it is the register which already exists in consultation units. Add three columns to
    capture information on HIV testing: modalities (status at entry – known positive,
    known negative, unknown; HIV test done (Yes/No, specify date); results of the test
    (positive, negative, non-conclusive, referral to HIV treatment and care services)
  o Register for index cases;
  o Monthly HIV testing synthesis form;
  o Referral forms;
  o Quality assurance logbook

II. Linkage from HIV testing into treatment and care

Linkage implies the immediate accompanying of the newly tested HIV positive patient to the treatment
and care services.

All opportunities must be exploited to ensure all HIV+ patients diagnosed both at community or health
facility levels are initiation early on ART.

Contact with treatment and care services must be done immediately after post-test counselling.

NB: Patients must always be given the opportunity to choose another treatment and care service
rather than the place of diagnosis.

1. Description of the steps for linkage using the through referral forms or voucher

   • Step 1: Record the telephone number (s) of the person tested and of two (2) other contact
     persons, the location plan / reference points of the home of the tested person in the HTC
     register/ HTC form and in the referral form / voucher;
   • Step 2: Counselor and patient share their numbers with each other and do a trial call on the
     spot to verify that the recorded numbers are working;
   • Step 3: Fill out the referral form / voucher and hand it over to the HIV + person as described
     in the diagram below.
   • Step 4: Do a follow up of the person linked to ART through telephone calls, SMS, and
     community actors. Telephone calls to these patients will be made on a weekly basis, once a
     week for 2 weeks and after 2 unsuccessful calls, call the other registered contact person (s). If
     unsuccessful after one month, organize a home visit or tracing by community actors (CHW,
     village delegates, dialogue structure members, etc. ...) using the location information
     provided during the testing;
   • Step 5: Enter the unique identification code of the patient in the HTC register;
• Step 6: Make a weekly summary of persons referred and linked to care and archive information, forward it to the health facility, district, RTG and national levels for action.

**TRIPLE REFERRAL SYSTEM: Movement of referral forms**

2. Description of the combined linkage method (using referral form/voucher, phone calls and or physical support)

- Step 1: Follow the linkage procedure using the referral form or voucher;
- Step 2: Call the focal point in charge of linkage of HIV+ persons to health facility (Coordinator, PSS, ward charge, etc. in the receiving referral unit to make an appointment for them and follow-up the linkage;
- Step 3: Enter the date of appointment and any other information on the voucher;
- Step 4: Follow up the person linked to care through telephone calls, SMS, and community actors. Phone calls to the referred patients will be done on a weekly basis, once a week for 2 weeks and after 2 unsuccessful calls, call the other registered contact person(s). After a month, organize a home visit or tracing by the community persons (CHW, village delegates, dialogue structure members, etc. ...) using the location information provided during the testing;
- Step 5: Enter the patient's unique identification code in the HTC register;
- Step 6: Make a weekly summary of persons referred and linked to treatment and archive the information, forward it to the health facility, district, RTG and national levels for appropriate action.

**NB:** The telephone directory of HIV service providers including counsellors and linkage Focal points in HIV management units (CTAs, UPECs, PMTCT, TB and others sites) be made available to all HTC actors by the Regional Delegation of Public Health/ Regional Technical Group to facilitate patient referral and counter-referral.

3. Entry points for linkage between testing Service/Units and ART Services

Linkage will be carried out at several levels depending on the model of testing used and who is being targeted:

1. Linkage to ART services from community-based HIV services/sites (Multifunction centre for the promotion of Youth, key population CBOs, refugee camps, etc ...) with health Area management teams
• Responsible person: Facility healthcare provider responsible for disclosing the result of the HIV test to the HIV+ person
• Follow the procedure for linkage to treatment and care using the triplicate booklet / voucher at the disposal of the HTC team to fill in all the referral information, in addition to physically accompanying the person to the HIV treatment service

2. Linkage between outreach HIV services/sites in the community with the health area management teams to ART services

• Responsible person: Facility healthcare provider responsible for disclosing the result of the HIV test to the HIV+ person
• Follow the procedure for linkage to treatment using the triplicate booklet/voucher at the disposal of the HTC team to fill in all the referral information, in addition to physically accompanying the person to the HIV treatment service

3. Link between community outreach HIV services/sites (key population, CBOs, refugee camps, etc.) with mobile teams (MT) to ART services:

➢ In the absence of a psychosocial support counsellor (PSS) within the Mobile team:
  • Responsible person: The Psycho-social counsellors (PSS) of the mobile team in charge of disclosing the result of the HIV test to the HIV+ person;
  • Persons involved: Focal point in charge of the linkage to the nearest ART service or the one that is the choice of the HIV+ person;
  • Follow the combined linkage method (using referral form/voucher + physically walk the person + phone calls with the treatment services) to link HIV+ persons to treatment.

➢ When a PSS takes part in the testing within the mobile team and the patient choses to be followed up in the treatment unit where the PSS works:

  • Responsible person: Paediatric and adult Psycho-social support person (PSS) of the mobile team; Other person involved: Psycho-social counsellor (PSC) in charge of announcing the HIV test result to the HIV+ person;
  • Persons involved: The Psycho-social counsellor (PSC) in charge of disclosing the HIV test result to the HIV+ person
  • Follow the combined linkage method (using referral form/voucher + physically walk the person + phone calls with the treatment unit) to link HIV+ persons to treatment services.

❖ Specific cases:

➢ Patients tested HIV+ by mobile teams but not yet linked to treatment and care Services: In the follow-up of patients previously tested by mobile teams but not yet linked to treatment and care:

  • The regional technical group should make available to their mobile units the template for monitoring HIV+ persons of April 2016 from which patients who are not yet on ART will be extracted.
• At the end of the day, mobile teams should share the list of patients referred for ART initiation with the concerned health facility.

• The Psychosocial counsellors in those health facilities book appointments with the patients and ensure they are received in priority during their first visit to the health facility;

• Those patients are tracked by the Psychosocial Counsellors of the mobile unit in collaboration with psychosocial support staff until the maximum number of patients lost are found and initiated on ART.

• The results of patient tracking should be documented and communicated to the Central Technical Group on a daily basis.

• Mobile teams must seize all opportunities to find those HIV+ people and link them to ART services.

4. Linkage of HIV+ patients to HIV services/sites in a health facility without ART.

• Responsible person: The health facility care provider in charge of disclosing the result of the HIV test to the HIV+ person

• Follow the combined linkage method (using referral form/voucher + physically walking the person+ phone calls with the treatment and care services) to link HIV+ persons to treatment.

5. Linkage of HIV+ patients to HIV services/sites in a health facility with ART

To avoid missing any opportunity to link an HIV-positive patient to treatment and care for proper follow-up, the following situations will apply:

• The focal point at each entry point in charge of linkage to treatment and care services (PSS, or other designated persons) will act as the linkage persons with the treatment and care services.

• On the day of disclosure of the HIV test results, the patient will also receive pre-therapeutic ARV education and ART adherence counselling. All patients tested HIV+ during the month shall be initiated on treatment with this information documented and reported by the PSS staff.

The following tasks will be done by the corresponding officials:

- The heads and ward-charges of the various units (blood bank, hospitalization, emergencies, outpatient department, vaccination, VCT, TB, treatment services, etc.) should
  o Add two columns to the existing register in each unit where the patient’s HIV status, therapeutic status and outcome will be captured, to enable the PSS see all tested patients and link them to HIV care and ART.

- The PSS staff should physically accompany patients to the HIV treatment service of the health facility.
  o Each patient should receive pre-therapeutic ARV education on the same day that results are collected to help reduce the number of patients loss to follow-up. The aim been to initiate ARV to all patients diagnosed HIV+ during the month in the health facility.

- The healthcare provider or PSS worker who did the post-test counselling is responsible:
  o Completing the internal referral form ;
  o Attaching it to the Patient’s Card ;
  o Taking the patient diagnosed HIV+ to ART, confirm their referral by entering the Patient Unique identifier Code in the reference register of the HTC Unit and, ensure the patient is effectively initiated on ART;
At the end of each month, the PSS worker prepares a report with statistics on the patients tested and linked to treatment for each entry point.

**Specific cases:**

- **In the ANC and delivery rooms**, standard operational procedures for PMTCT should be applied. All HIV-positive pregnant women as well as exposed infants should be immediately linked to the treatment and care services and initiated on ART.

- **In the maternity**, psychosocial or paediatric psychosocial counsellors as well as maternity ward-charges or designated focal point in charge of linkage should:
  
  (i) Identify and register all HIV-exposed infants (HEIs) born to HIV+ mothers,
  (ii) Counsel mothers on the importance of Early infant diagnosis at 6 weeks,
  (iii) Set up an appointment for the collection of DBS samples of HEIs according to the vaccination schedule,
  (iv) Remind mothers of their appointments at least two (02) days before through SMS, telephone calls and community actors (in rural areas),
  (v) Monitor the child’s PCR results at the regional level through the RTG Coordinator or the PMTCT FP,
  (vi) Remind the mother via SMS or telephone call to collect the PCR results, and immediate initiate children with positive PCR on treatment.

If the infected child is moved to another locality, the health worker (maternity ward-charge) or the paediatric psychosocial counsellor should link the mother with another psychosocial counsellor in the new area of residence (exchange of telephone numbers and reference points of the new home) and close the file in the health facility of origin.

- In the case of the following two groups of persons: HIV+ patients in health facilities who were not immediately linked to HIV treatment, and patients registered in pre-ART in the health facility, the recommended management is as follows:
  
  o Person responsible for linkage: Psychosocial support counsellors;
  o The ARPR /ARV dispensers should make available to PSS and pediatric PSS staff the list of these PLWHIV+, using the appointment register, the laboratory registers, or any other register in the health facility.
  o Data clerk or ARV dispensers must make available to PSC and paediatric PSC the list of people living with HIV, elaborate using the appointment book/register, the laboratory log/book or any other logbook in the health facility;
  o PSS and Paediatric PSS should contact HIV+ people via phone calls and home visits to meet and convince the maximum number of patients to be on ART and if necessary, re-do the post-test counselling.
  o Make telephone calls to these patients on a weekly basis, once a week for 2 weeks and after 2 unsuccessful calls, call the other registered contact person(s).
  o After one month of unsuccessful search, the psychosocial counsellor should organize a home visit using the location information provided by the patient during testing.
  o The psychosocial counsellor should give a weekly progress report to the coordinator of the HIV management unit who in turn will forward the information to the RTG on the same day for appropriate action.

4. **Tools to be used in the referral of patients**
- Booklets of referral/counter referral forms/vouchers for HIV+ patient’s with stumps for referral from testing to ART services;
- The appointment book/register;

III. Antiretroviral treatment

Early initiation ARV treatment reduces morbidity and mortality relating to HIV and is increasingly being tolerated thanks to the new drugs.

This treatment also has a preventive role in the transmission of HIV.

Consequently, the procedural approach in "Test and Treat" is to systematically propose Antiretroviral Treatment (ART) to any patient tested HIV-positive without taking into account the WHO clinical staging or the CD4 count.

The initiation of ARV treatment shall be done in health facilities that offer HIV testing (namely ATC/MU, PMTCT sites, TB diagnostic and treatment units, as well as standalone HIV testing sites), provided the site staff have been trained on HIV management.

Treatment and care should be carried out by a multidisciplinary team of trained health care providers (doctors, paramedics, laboratory technicians, pharmacists, and pharmacy attendants), receptionists, community health workers, psychosocial counsellors, data clerks and expert HIV patients.

The monitoring of patients on ART should be done:

- At the level of health facilities;
- At the community level;

The monitoring of patients will be focused on treatment adherence and ARV dispensation.

1. The role of stakeholders of the health system in the role out and implementation of the “Test and Treat” strategy

➢ Role of National and Regional level officials to ensure the successful role out of “Test and Treat” strategy in all health facilities:
   - Decentralize ART to other health facilities (MHC, IHC TDC, PMTCT sites, HTC standalone sites etc)
   - Train field health care providers on ART dispensation and the management of sides effects,
   - Ensure the availability of updated guidelines at service delivery points,
   - Organize the commodity procurement and supply chain management system
   - Organize site support systems through mentoring/mentorship and facilitative supervision,
   - Provide these structures with tools for data collection, analysis and reporting
   - Strengthen task shifting between health facilities of various levels as per the national guidelines on task shifting.
Role of health facility Managers with support of District Health Services and Regional Delegation of Public Health

- Strengthen pre and post-test counselling in health facilities through in-service training of medical staff including Psychosocial counsellors;
- Provide on-site training of providers on ART (done by UPEC and CTA mentors);
- Organize services to ensure systematic post-natal follow-up of the mother-child pair and HIV-exposed infants in alignment with the vaccine calendar until the end of the exposure period (cohort monitoring);
- Create friendly spaces for children and adolescents and adapt visiting hours to suit their needs;
- Prepare the transition of adolescents to adult ARV services;
- Create age-specific support groups and conduct targeted therapeutic education activities;
- Organize the treatment process of HIV positive patients and the patient flow.

2. Initiation of ARV treatment for old or newly diagnosed HIV+ patient

All HIV+ patients should be initiated on ART in accordance with the following steps:

- Verify and confirm the authenticity of the HIV positive test result presented by the patient: That is, making sure the patient has been re-tested (for verification) according to the national algorithm. If not, repeat the HIV test;
- Provide psychological support (counselling, therapeutic education) to help patients accept their status and ART and then obtain their informed consent and contact information;
- Open a standard medical file and assign the patient a unique identification (unique code that complies with national guidelines);
- Assess the clinical state of the patient;
- Ensure the prevention and treatment of opportunistic infections where appropriate.

➢ If the patient agrees to start treatment:

- Strengthen patient therapeutic education for proper adherence to treatment and retention in the healthcare system;
- Prescribe ART according to national guidelines based on clinical status;
- Provide a lab request form for renal function (urine strips, serum creatinine if the treatment regimen contains TDF) or haemoglobin (for Zidovudine);
- Give the patient an appointment within two weeks of treatment to assess their understanding of treatment, adherence, and tolerance.

➢ If the patient does not agree to start treatment:

- Identify and understand the reasons for refusal;
- Strengthen counselling and communication with the patient until consent is obtained;
- Negotiate close follow-up appointments as soon as possible (1 to 2 weeks) and intensify counselling and communication sessions until consent is obtained;
- Initiate treatment as soon as consent is obtained (following the steps described above for treatment).

➢ Preparation of the patient and control for good acceptability of treatment

How to prepare PLHIV for ART
▪ Make them understand and accept what antiretroviral therapy is, its benefits and the steps to follow to make it a success.
▪ Establish a relationship with your patient
  o Create a climate of trust.
  o Ensure confidentiality.
  o Develop mutual respect and non-judgmental attitudes.
  o Develop clear communication and seek patients consent for home visits.

▪ Organize sensitisation, information, therapeutic education and psychosocial support sessions for the patient with focus on the illness, treatment prescribed, care and support as well as health seeking behaviours.

3. Steps for tracing of Pre-ART or lost to follow-up Patients for ART initiation

▪ Stage 1: Identify HIV-positive patients (children, adults) in the health facility who were not eligible for treatment, per the previous guidelines (patients who were waiting for treatment).

  This identification should be done using all existing tools in the health facilities (pre-ART registers, laboratory registers, mother and child postnatal registers, patient medical records and software used to monitor HIV+ patients such as ESOPE software where available).

  All UPEC and CTA teams including data clerks and psychosocial counsellors (ARPR and PSS) should be involved.

▪ Stage 2: Psychosocial counsellors, in collaboration with the coordinator of the approved treatment centre/management unit should provide weekly reports or update on patients in need of treatment (patients on Pre-ART and lost to follow-up);

▪ Stage 3: Psychosocial counsellors should actively trace all patients in need of treatment using various methods (phone calls, text messages and Home visits or in communities) and bring them back into the system of ARV treatment (LTFU tracing methods)

A weekly update of progress made should be transmitted to the coordinator of the HIV management unit, who will forward the compiled information to the Regional Technical Group at the end of the month. The monthly retention committee meetings shall show progress made on ART retention indicators.

This analyse should be done for patients diagnosed in health facilities as well as by mobile teams.

4. Improving the quality of services in the context of “Test and Treat”

➢ Role of the Health facility Manager

The patient flow and the organization of health care in each treatment and care site must be defined to ensure that good quality services are offered to the users.

To that effect, the Manager incharge of each site should:
▪ Improve patient reception (comfortable waiting areas, polite staff, appropriate working hours, etc.)

This analyse should be done for patients diagnosed in health facilities as well as by mobile teams.
Strengthen task shifting within the health facility in line with the national guidelines on task shifting

- Ensure the availability of tools for monitoring HIV+ patients (medical files, registers, data collection/reporting forms, etc.)
- Carry out internal supervision of activities including review and validation of data
- Ensure a multi-month (3 months) dispensing of ARV drugs for stable patients
- Involve CBOs in the Community dispensation of ARV drugs for Stable Patients
- Improve the working conditions of healthcare workers.

Set up coordination meetings for HIV management activities

Define the roles of stakeholders in the treatment process to ensure the needs of patients are met

➢ Mentorship role by health care facilities (ATC and HIV Management Units)

Mentoring is the practical support provided to accompany health facilities to acquire clinical, biological, psychosocial and data management skills to improve the quality of HIV treatment and care services.

CTA and UPEC mentors are responsible for the quality of treatment and care offered in mentored facilities.

The mentor health facility should:

- Provide training for health care providers of the mentored health facilities (onsite training or workshops, practical training courses in mentoring CTAs);
- Carry out regular multidisciplinary supportive or facilitative supervisions in mentored facilities to improve the quality of clinical and psychosocial care, management of data and commodities, biological and virological monitoring in keeping with the technical level of the mentored facilities;
- Establish a Network/ Directory of treatment facilities under their responsibility with one another to facilitate information sharing, referral/counter-referral, and coordination of interventions;
- Facilitate operational research within their health facilities
- Coordinate, monitor and evaluate the activities of health facilities within the framework of mentoring (administrative, scientific, and technical meetings related to mentoring).

➢ Role of the health care provider

- Comply with national guidelines for treatment and care
- Respect the ethics of the profession (reception, confidentiality, empathy, active listening, etc.)
- Identify the specific needs of each patient,
- Provide treatment and care based on patient needs (differentiated care): clinical stage, psychosocial status, etc.
- Adapt patient follow-up depending on the clinical and psychosocial status.
- Carry out self-assessment/critique
- Work closely with providers from other disciplines
- Implementation from supervisory visits to improve on service quality.

5. Enrolment and documentation of PLWHIV in the active file on site
Enrolment of a patient in an ART Site requires the following:

- Assign an "ART Code" to the patient according to national guidelines
- Document the HIV-positive person’s information in the ART register (including screening for TB and findings of the psychosocial assessment);
- Hand over to the PLHIV their follow-up card with the unique identifier number written on it (in keeping with national guidelines)
- Write out the contact details (telephone number, address and reference point around the home) of a relative of the patient who will help take his medication and measure their understanding of the role of a support person for treatment adherence (e.g. if the patient fails to honour their appointment/treatment, the companion can be contacted)
- Document all patient information in the program tools (both physical and electronic), ART register, patient medical records, etc.;
- Give appointments to patients for ART pick-up, therapeutic education and clinical follow-up.

6. Tools required for ART management
   - National guidelines for HIV Management
   - Patient medical records (child, adult);
   - Patient follow-up card,
   - Appointment logbook;
   - ART Register
   - ART & CTX dispensing Register
   - Tracking logbook of for defaulters or Lost to follow-up patients;
   - TB screening register
   - Lab request forms
   - Viral Load testing and monitoring register
   - Support group register.
   - Patient Transfer form.

IV. Clinical and biological monitoring of patients

1. Monitor all patients on ART in keeping with national guidelines
   - Patient monitoring will be done in keeping with the differential care model. i.e. differentiated service delivery models will be offered following the duration on ART, adherence to treatment and viral suppression (see diagram below);

   - The clinical and biological monitoring of patients should be in keeping with the monitoring schedule defined in the national guidelines.
     - For all patients on ART, Viral Load test should be done at 6 months following initiation, then at the 12th month and then once yearly for virally suppressed stable patients.
     - For patients who are not virally suppressed at 6 months a repeat viral load is done 3 months after proper adherence counselling. If virally suppressed repeat the Viral load at the 12th month and then one year after.
     - When VL is not available, do the CD4 counts every 6 months.
     - For children, viral load should be done every 6 months.
     - For patients on Tenofovir, do serum creatinine at 1 month, 6 months then once a year. And for patients on Zidovudine do Haemoglobin at 1 month, 6 months then once a year.
However, a differentiated follow-up model will be applied for monitoring of the following patient types, and the duration of ART

**DIFFERENTIATED MODELS OF CARE**

**APPROACH BASED ON THE DURATION OF TREATMENT**

### CARE OF PATIENTS WITHIN THE FIRST YEAR OF ART (≤ 12 MONTHS)

- HIV patient in an advanced state of disease
  - WHO Stage 3 or 4
  - CD4 count ≤ 200 cell/mm3
  - CD4 ≤ 25% for children ≤ 5 years old

- HIV patient presenting well
  - WHO stage 1 or 2
  - CD4 ≥ 200 cell/mm3
  - CD4 ≥ 25% for children ≤ 5 years old

Weekly follow-up until ART initiation, and then at week 2 and 4 after ART initiation, and then monthly for the first 6 months of ART

### CARE OF PATIENTS BEYOND FIRST YEAR OF ART (≥ 12 MONTHS)

- Unstable patient
- Stable patient

Eligible for Community ART Service delivery as a package of Care

#### 2. Follow-up during the first year of ART

- For patients in advanced stage and newly ill patients
  - Weekly follow-up until ART initiation, then at 2 weeks and 4 weeks after ART initiation, and then every month during the first 6 months on ART
  - For some patients, several visits or even hospitalization may be necessary to stabilize the clinical, psychosocial state as well as other conditions

#### 3. Biological monitoring of patients

- Set up the system to facilitate access to viral load testing
The viral load system is well described in the 2017 – 2020 National operational plan to scale up Viral load in Cameroon.

- **Reference laboratories selected for the scale up of Viral Load testing**

In the first phase, 08 laboratories in public and confessional health facilities were approved through a circular letter signed by the Minister of Public Health.

The following laboratories have been declared territorially competent and organised in a network as follows:

i. **Centre, South and East regions:**
   - Centre Pasteur du Cameroun;
   - CIRCB (Chantal Biya International Reference Centre);
   - Catholic Medical Centre of Nkolondom, Yaoundé.

ii. **Adamaoua, North and Far North regions**
   - Centre Pasteur Annexe Garoua, North region.

iii. **South West region:**
    - National EID Reference laboratory, Mutengene, in close collaboration with Buea Regional Hospital annex.

iv. **North-West and West regions:**
    - Tuberculosis laboratory, Bamenda regional hospital
    - Saint Vincent Hospital in Dschang in collaboration with the Bafoussam Regional Hospital

v. **Littoral region:**
   - Laquintinie Hospital Laboratory, Douala.

- **Sample collection**

  i. **Types of samples to measure plasma HIV-RNA**

Viral load is a quantification of the number of copies of the virus (HIV-RNA) in a given volume of fluid (blood, sperm, saliva, breast milk or any other biological fluid).

✓ **Plasma**

Plasma is obtained from whole blood samples collected in tubes with anticoagulant (EDTA). The sample is centrifuged, the plasma is collected and aliquoted in cryotubes for preservation. Plasma samples may be stored at 15-30 °C for up to 24 hours or at 2-8 °C for up to 5 days. If longer storage is required plasma storage should be kept frozen at -70 °C or lower. Avoid multiple freeze thaw cycles for frozen plasma. Once thawed, if plasma is not immediately processed it can be stored at 2-8 °C for up to 6 hours.

Freshly drawn specimens (whole blood) may be held at 15-30 °C for up to 6 hours or 2-8 °C for up to 24 hours prior to centrifugation to obtain plasma.
 ✓ Dry Blood Spots (DBS)

The term “Dry Blood Spot” or DBS means dried blood drop collected on specialized filter paper. Since 1960s, filter papers have been used to study several pathologies in infants. It is a method of collection of blood on filter paper for serologic or molecular analysis. Blood samples are collected, dried, packaged and transported to be analysed and archived. The procedure was adopted because it is easy, flexible, cheap and easy to transport at room temperature with minimal risk of contamination.

For setting up of research and diagnostic programmes on HIV in limited resources countries. It is applicable in sero-prevalence studies, early infant diagnosis, viral load quantification, genotyping and resistance testing.

Frequency of samples collection:

The frequency of sample collection depends on the organization by each health facility or ART site.

Ideally, for health facilities that have the capacity to collect, centrifuge, aliquot and store plasma in the right temperatures as slated above, it would be more appropriate to collect samples from Monday through Friday at their convenience.

Some Health facilities can propose a few days in the week (1 or 2) for sample collection depending on the system in place.

The selection of any of the above options is the decision of each site provided sample integrity is not compromised.

ii. Sample collection, packaging and transportation to reference laboratories

The flow for the collection of samples (whole blood, frozen plasma and DBS) will follow a general process that is described in the figure below. This figure suggests to create “hubs” for the storage of samples (plasma and DBS) before they are sent to the reference laboratories.

Health facilities (Sites) that have the capacity to centrifuge and store, can collect the samples, centrifuge and aliquot before sending to the hubs or the reference laboratories depending on the distance.

- For sites that cannot centrifuge or aliquot can directly send to the hub laboratories or reference labs between 4-6 hours;
- Ideally, sites that are far and do not have capacity to centrifuge and aliquot can collect DBS (Dried Blood Spot) dry, package and ship to the reference laboratory.
- Sites that are not far but have capacity to centrifuge an aliquot can do so before sending samples to reference laboratories within 6 hours.
• **Ways of transporting samples**

In the framework of the scaling up of the viral load test, patients in peripheral health facilities will have their samples collected at the level of the laboratory of their treatment site. Whole blood samples will be centrifuged, aliquoted and cryopreserved in laboratory of the Health facility before being shipped to the reference laboratory for quantification of viral load at the frequency pre-defined by the treatment Centre/unit and the reference laboratory.

Health facilities and Community based organisations (CBO) that do not have laboratory equipment and are close to the reference laboratories will directly send their whole blood sample to the reference laboratory, which will do the centrifugation, aliquoting and cryopreservation and analysis. Otherwise, they will also send samples to the nearest “Hub” before they are sent to the reference laboratory. Ideally sites like this should collect DBS samples.

Given the actual capacities of Central and peripheral health facilities involved in care and treatment of infected persons in Cameroon, and the proposal to distribute sites around reference laboratories, the above mentioned sample flow has been has been adopted (see diagram above).

• **Training of site laboratory staff**

**Laboratory staff** should be trained on:
- Techniques and tools for sample collection for viral load quantification
- The different sample types necessary to do viral load tests
- Methods of sample collection, centrifugation, aliquoting, cryo-conservation and transportation to the reference laboratory
- DBS collection, drying, packaging and shipment to the reference laboratory
- Sample transport and results return
- Tools for documenting Viral load results
Prescribers must be trained on;
- Viral Load testing procedures
- Demand creation for viral load test,
- Interpretation of results,
- The management of treatment success
- Surveillance of drug resistance
- Management of toxicity of ARV.
- The management of virological or treatment failures
- The surveillance and prevention of drug resistance (HIVDR), including early warning indicators (EWI)

The setting up of multidisciplinary team for better management of patients with treatment failures.

4. **Follow up of patients one year after ART initiation**

<table>
<thead>
<tr>
<th>Definition</th>
<th>Unstable patient</th>
<th>Stable patients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The presence of at least one of these criteria determines an “unstable” patient</td>
<td>Taking into account the operational context of Cameroon, the presence of all these indicators makes it possible to define a stable patient</td>
</tr>
</tbody>
</table>

- Very advanced patient (WHO stage 3 or 4):
- On treatment for less than 12 months
- Presence of an active OI (including TB) in the last 6 months
- Evidence of poor adherence over past months
- Recent VL ≥ 1,000 copies
- Patients who have not completed 6-month INH preventive therapy
- Pregnant or lactating women
- Body Mass Index <18.5
- Age <20 years

- Patient on ARVs for 12 months
- No active OI (including TB) in the past 6 months
- Evidence of adherence to treatment in the past 6 months
  (*Not have missed its last 6 drug gathering appointments in one period even if it was multi month prescription*)
- Recent viral load <1,000 copies / ml (*for patients in urban areas where viral load is available and considering the extension plan of the country*)
- Non-pregnant/non-nursing women

Monitoring after 12 months

- **Followed up every month,** however, additional visits may be necessary in case of medical and/or psychological pathologies
- Standard Care package
  - Clinical evaluation including nutritional assessment

- Frequency of monitoring in the health facility: **Every three months**
- Standard Care package
  - Clinical evaluation including nutritional assessment
| | FP for women of child bearing age to prevent unwanted pregnancy | FP for women of child bearing age to prevent unwanted pregnancy |
| | Prevention and management of possible OIs | systematic search for TB, STIs |
| | Psychosocial PEC | Evaluation of adherence |
| | Therapeutic education | Assessment of viral load (once a year) or CD4 if VL is not available every 6 months |
| | Evaluation of tolerance to treatment | Renewal of ART/CTX prescription every 3 months |
| | Assessment of adherence | Supply of ARVs/CTX every 3 months |
| | Refer patient for appropriate management if necessary | |

5. **ART Dispensation**

It can be done:
- In the health facility or
- In the community

**In the health facility**, ART supply is done every 3 months for stable patients, in order to reduce the waiting time for patients and to reduce workload for the facility. However, the patient should always be seen by health care providers for clinical and biological follow up according to national guidelines.

**In the community**, Community dispensation is governed by a Ministerial order (LC N° D36-57/MINSANTE of 04/11/2016 designating community-based organizations (CBOs) for the Community dispensation of ARVs.

Community dispensation depends on:
- The Human Resource capacity of health facilities to supervise community based organisations (CBOs) within the framework of ARV dispensation;
- The existence of functional community-based structures;
- Patient’s consent to go to a CBO attached to this health facility (patients are free to either accept or refuse)
- The existence of a referral/counter-referral system between the CBO and the mentoring health facility with documentation.

Details of the organization of Community ART Dispensation are described in the National Guidelines.

V. **RETENTION IN CARE FOR PEOPLE LIVING WITH HIV ON ART**
OPERATIONAL DEFINITIONS FOR APPOINTMENT KEEPING:

▪ **Retention in care** is the ability for a patient on treatment to attend healthcare clinic within 90 days of their last scheduled appointment for medicine collection, laboratory testing, and/or clinical review and is not documented as having died, or stopped treatment or as lost to follow-up.

▪ A patient is classified as **On time** when they arrive on the exact date of their expected appointment

▪ A patient is classified as having a **kept appointment** when they arrive 7 days before to 2 days after their expected appointment

▪ A patient is classified as having a **missed appointment** if they are equal to or more than 3 days, but less than or equal to 7 days, late to their expected appointment.

▪ A patient is classified as a **defaulter** if they are more than 7 days, but less than or equal to 90 days, late to their expected appointment.

A patient is classified as **lost to follow-up** if they have not been to an HIV care center for more than 90 days (3 months) since their last appointment date for medical follow-up, Biological follow-up tests or medicinal supply and is not registered as dead, on treatment interruption or transferred out despite efforts made by clinical provider.

![Figure 5: Operational Definitions of Appointment Keeping](image)

1. **Barriers to the retention of patients on ART**

   - **Health system factors**: Availability of drugs and complementary services, side effects of drugs, cost of services, patient reception, quality of service delivery, confidentiality, etc.

   - **Patient factors**: low purchasing power, self-stigmatization, domestic violence, patient’s health status (asymptomatic patient), patient’s beliefs, use of other non-conventional drugs, ignorance about treatment, non-acceptance of the HIV status, etc.

   - **Environmental factors**: geographical inaccessibility, stigma and discrimination, lack of support from the social circle and community, etc.
2. **Actions to improve retention**

**Preventive measures to be taken**
- Strengthen pre- and post- test counseling;
- Improve on quality of services;
- Strengthen therapeutic education and adherence counseling (see National guidelines);
- Organize patient flow to reduce waiting time (see below);
- Link patients to support groups for people living with HIV (“expert patients”);
- Develop patient education tools and make them available at sites;
- Create children and adolescent friendly spaces adapted to their needs;
- Adapt visiting hours to the specific needs of children (adolescents);
- Schedule ART dispensation pick up time by patient cohorts (08.00 – 10.00, 10.00 – 12.00, etc.);
- Organize community dispensation of ART for voluntary stable patients;
- Organize multi monthly ART dispensation every 3 to 6 months for stable patients;
- Give longer clinical follow up appointments for stable patients;
- Use SMS to remind patients of their appointments;
- Encourage patients who have respected their appointments for at least 12 months through various incentives (certificates or letter of encouragement, privilege card, etc.).
- Minimize patient fee at sites;
- Improve access to viral load testing.

**Remedial actions to be taken**
- Conduct an active search for patients who have missed appointments via SMS and telephone calls, etc.).
- Conduct home visits for patients who default or are lost to follow-up.

3. **ART retention through therapeutic education and adherence counseling**

To improve treatment adherence and improve retention on ART, patients should have access to the adherence tips at the frequency described below:

- **For newly initiated ART patients:**
  - The PSS and/or the Psychosocial Counselor of the health facility should organize an adherence counseling session at least 2 weeks after ART initiation and then at 1 month intervals during each clinical visit or appointment for drug refills for a period of 12 months (see management guidelines);
  - Refer to the therapeutic education guidelines for the frequency of various adherence counselling sessions. Take into consideration patients who are non-adherent to treatment (defaulters and lost to follow up).

- **For old patients and those who are adherent:**
The PSS and Psychosocial Counselor or the CBO dispensers should organize an individual or group adherence counseling session quarterly or per semester based on the calendar of clinic visits to the health facility for drug refills. The sessions should take place before ARVs are dispensed. For patients requiring special follow-up, individual therapeutic education and adherence counseling sessions should be organized in health facility with the PSS or other counselors and in Community Based Organizations with their peers as part of a Community Support Group.

- **Specific cases:**
  
  - **Infected children and adolescents:** PSS and pediatric counselors should organize age-appropriate therapeutic classes in alignment with the vaccination calendar;
  
  - **In PMTCT sites:** Pediatric PSS, ANC and maternity ward charges should organize therapeutic education sessions and adherence counseling for HIV-positive pregnant women and infected children at sites according to national guidelines;

4. **Improve retention on ART by monitoring the appointments of PLHIV**

4.1. In ART sites (ATC/MU, PMTCT sites, and TDCs),

**Person in charge of monitoring:** Psychosocial support agent/ Coordinators of HIV care and treatment sites.

- **For persons living with HIV having “arrived on time or respected his appointments”:**
  1. If patients arrived earlier, congratulate them for coming, determine the reason for their arrival before the appointment date, identify their real appointment date in the calendar and indicate that the PLHIV arrived earlier, proceed as indicated step # 3 above;
  2. If patients arrived on the day of appointment proper (allow up to 2 days after the appointment date), congratulate them for coming on the right day, look for the date in the diary/appointment register and mark as “Arrived on time”, then proceed as described in step # 3 above;
  3. If Patient came 3 days or more after their appointment, congratulate them for coming even though late, find out the reason for coming after the appointment date, look for appointment date in the diary and mark that the PLWHIV came after the appointment date and proceed as described in step # 3 above;
  4. Verify and update contact details of patients and those of the persons accompanying them in the follow-up register including for HIV-positive pregnant women
  5. Do a pill count, calculate and record the percentage of adherence at each drug refill visit (for CTX and ARV) and advice patients and accompanying persons based on the findings. Document the percentage of adherence in the patient’s file.
6. Screen for TB at each visit and refer if TB is suspected for further lab diagnosis and treatment. Also screen for STIs and refer for further diagnosis and treatment.

7. Give patients and their companion or treatment supporters’ contact details of the treatment site or a person to contact in case of need for information or assistance.

8. Ask the patient and their companion if they have any concerns or questions and address their concerns appropriately. Allow enough time for them to ask all their questions.

9. Carry out ART adherence counseling and other topics emerging from the discussion e.g. on drug side effects at each visit and for at least 3 consecutive visits after ART initiation and document in the patient’s file. The patient’s companion should be present during each of these counseling sessions.

10. Refer to the PSS for additional counseling sessions, especially if the patient came after his appointment date and document in the patient’s file.

11. Educate the patients’ companions on their role to support patients and encourage them to always come with the patients at each clinical visit, especially during the first 3 to 6 months following ART initiation.

12. Encourage the patients to inform close family and friends of their status at each visit. Also encourage family HTC, couple counselling and partner notification and testing.

13. Encourage the patient to join a support group within the facility, community or at the jobsite.

➢ For patients having missed their appointments, defaulters or lost to follow up:

Patient follow-up in this case should be done in three (3) ways, (i) via telephone calls to patients and/or contacts, (ii) home visits by a PSS agent or community actor, (iii) text messages, depending on the patient type/situation through the following steps:

1. Share out and assign patients from the active file to each PSS to reduce workload and for special follow-up,

2. From the ARV dispensation or drug refill register, the PSS should identify and make a list of patients who have missed their appointments, were irregular or lost to follow-up at the end of each day;

3. The PSS should call each of these patients individually on the same day to find out why they did not come for their appointment jointly set up with the patient a follow up plan which in this case will be another appointment date as soon as possible;
4. Make another telephone call once every day for 1 week to all persons who have not yet answered their calls or who have not yet come to the health facility despite the new appointment;

5. After 2 unsuccessful calls within 3 days, call the patient’s contacts to have information on the patient and remind them of the appointment; if the patient has still not come to the health facility after 1 full week, call the patient again and schedule a home visit.

6. If patients you are looking for lives in a rural or hard to reach area, the PSS agent or facility manager should use the opportunity of every community staff in the area to get information and remind of the appointment (Community Health worker, Integrated HC and medicalized HC staff, members of dialogue structures, village delegate, etc.). After 3 unsuccessful reminders, a home visit should be carried out as per the operational diagram described below.

**NB: Content of the home visit (must be done with clients consent)**
- Greetings and ask about one another’s welfare,
- Explanations/ reasons for missed appointment or defaulting,
- Jointly look for and address the reasons given,
- Discuss the impact of treatment on the quality of life, reinforce counselling,
- Set a new appointment date within one week following the home visit,
- Carry out another home visit 10 days later if the appointment was not respected
- Document in tracking tool and also document Patients return to ART.

**4.2. In community-based organizations (CBO)**

**Responsible person for follow up:** 1 person designated by the CBO and dedicated to retention of people living with HIV in the active file

The aim is to keep patients who are adherent in the active file in the care system and to detect cases to be monitored or referred to the mentoring HIV management healthcare facility.

Follow-up of these patients should be done through phone calls or SMS at least once a month to encourage the patient, have information on them and identify specific needs and to address them. If necessary, meet the patient individually before the therapeutic education session.

A therapeutic education and adherence counseling session should be organized once a month, quarterly or every semester depending on the schedule for drug refills in the CBO.

The sessions should be carried out in groups or individually before the ARVs are dispensed. If a patient in the CBO's active file has a missed appointment or becomes a defaulter, without a reason, send them back to the health facility cohort for appropriate follow-up (see above) by the Psychosocial Agents.
5. Monitoring and coordination of linkage and retention activities

➢ In the HIV management Centers/Units

Within the framework of monitoring of retention activities, CTA and UPEC officials and supervisors of PMTCT sites are charged with the coordination and monitoring, in collaboration with managers of other services.

They are responsible for the implementation of the scope of work of the “retention committees” and the transmission of reports to the regional and then national level and, when necessary.

The indicators selected for the monitoring of retention in the health facilities are found in the TOR file of the retention committees as an annex. These indicators are currently being collected using various tools (ART registers, dispensing register, etc. ...) and must be reported once a month to the retention committee, who will transmit it to the Regional technical group and then to the Central Technical Group.

➢ Within the Community Based Organization
The Coordinator of the CBO should send monthly and quarterly reports to the Regional technical group and then Central Technical Group, with information on the retention of patients in their active file using the template defined by the Central Technical Group.

The mentoring CTA or UPEC coordinators are responsible for the follow-up of activities of the CBOs within the framework of community ART dispensation while the Central Technical Group is responsible for the coordination of the various activities carried out by stakeholders.

The indicators selected for the monitoring of retention in CBOs are found in the Community Dispensation Strategy document (under development) in annexes. These indicators are currently being collected using the various tools available in the CBOs (ART registers, dispensing registers, etc.) and must be reported once a month and quarterly in the activity report which is sent to the mentoring treatment Centre, to the Regional Technical Group, and then to the Central Technical Group.

VI. Coordination, monitoring and evaluation of the “Test and Treat” strategy

1. Coordination

The expected results from this strategy are:

i) Improved treatment and care for people living with HIV (children, adolescents, adults, pregnant women);

ii) Contribution towards the achievement of the “90-90-90” targets, ie make progress in the number of PLHIV who know their HIV status, the number of PLHIV on ART and the number of PLHIV on ART with viral suppression;

iii) Harmonization and standardization of monitoring and evaluation procedures and tools;

iv) Quality data collection and analysis.

The coordination of implementation of this strategy will essentially rely on coordination meetings between actors and partners involved at various levels of the health pyramid and meetings for the retention committees at the ART sites.

To attain the objectives set in this guide, a good coordination of planned activities among key actors which includes; CTG/RTG/NACC, Technical and Financial Partners (TFP), implementation partners, Various Technical departments of the Ministry of Public Health, HIV care and treatment services, is indispensable.

➢ Quarterly Meetings between NACC, TFP and MOH:

The aim is these meetings are to ensure a good implementation of the strategies laid down. Discussions will be focused on the achievements, bottlenecks and proposed solutions to
improve on the implementation and results. The meetings will also contribute in improving synergy between technical and financial partners.

➢ Quarterly Meetings of the retention Committees:

The retention committee is the platform for all discussions around the organization and implementation of the strategy at the health facility level. They hold meetings at the ART sites (care and treatment sites), organized by the coordinators of the Mentor treatment Centers/Units. The committee is also charged with the monitoring of results and the internal supervision of activities within the facilities.

The retention committee, which is a multidisciplinary team, will discuss:

- The availability of commodities at sites and the storage conditions,
- The functioning of Psychosocial support agents and the effectiveness in the implementation of their job assignments,
- The effective utilization of job-aid and other tools put in place for service delivery,
- Difficulties encountered and provide appropriate information.

2. Monitoring and Evaluation

➢ Data Flow

Modalities for monitoring of activities will rely on the institutional and logistic framework of the HIV health response monitoring-evaluation system.

- The validated indicators will be integrated in the data collection tools at national level and distributed to all health facilities;
- Data analysis and use will be done regularly at all levels of the health pyramid (health facility, district, regional, central level);
- Existing reporting mechanisms and tools on (data transfer, data validation, quantification of needs, monthly activity reports, etc.) shall integrate testing, HIV treatment and viral load suppression.

➢ Facilitative supervision:

Facilitative supervision which is the ideal tool for continuous training of the HIV management services, will be carried out by coordinators of the Mentoring treatment center as well as the Regional Technical Group, the Regional Delegation of Public Health and the Ministry of Public Health.

➢ Supervision of Psychosocial Support Agents (PSA) by regional and central teams:
This supervision will enable the regional and central teams to appreciate the activities implemented by the PSAs, exchange with all field actors involved in service delivery on the attained results.

- **The structures involved and their roles**

**At peripheral level**

- Health facilities and community organizations have as responsibilities:
  - To use tools put at their disposal by the regional coordination to report on expected results;
  - Collect and analyze quality data and transmit to the district, latest the 5th of the following month
  - Conduct monthly internal supervision and quarterly data review;
  - Mentor newly created ART sites or those with particular problems.

- **The district health services shall:**
  - Compile/synthesize and analyze data received from health facilities and CBO and provide feedback;
  - Input key data on HIV testing, HIV treatment as well as PMTCT and Viral load in the DHIS software. Data entries should be completed latest 10th of the following month and transmitted;
  - Ensure in-service and continuous training of health care providers and community health workers on monitoring-evaluation.

**At regional level:**

- The Regional Delegation of Public Health is responsible for:
  - Coordination of activities by all implementation actors;
  - Synthesize/compile and analyzing data received from districts, provide feedback disseminate information and results obtained from activities implemented;
  - Share information with RTG and the regional special fund for health promotion;
  - Transmit data from health districts to DLMEP latest on 15th of the following month;
  - Carryout quarterly supervisions of district health services and reviews data.

- The Mentoring treatment center (CTA) is responsible for:
  - Carrying out quarterly facilitative supervision of the treatment units and related network of health facilities, together with the pool of regional supervisors in collaboration with the Regional Delegation of Public Health and the Regional Technical Group.
At the central level: DLMEP/MoH and CTG/NACC ensure:

- Compile/synthesize and analysis data received from regional delegations and RTGs, provide feedback, and disseminate the data to various stakeholders;
- Integrated supervision every semester.

The various structures will use the existing monitoring-evaluation tools and report on indicators including those for testing and treatment among children and adolescents.

3. Efficient management of commodities

The availability of commodities is essential for the effective delivery of HIV services and good commitment of actors.

The committee in charge of quantifying and managing commodities will ensure timely quantification of needs (time period n+1), good monitoring and stock management of stocks using various technic in each reference laboratory.

The committee meets quarterly to monitor commodities used for testing, treatment and biological monitoring (RTKs, ARVs, CTX, Viral Load, CD4, etc), to anticipate stock-outs at national and health facility levels and to ensure continuous availability of supplies.
VII. APPENDICES

Annex 1: Legal framework of the “Treat All” strategy in Cameroon

The Ministry of Public Health has recently signed two decisions and several circular letters to set a framework for the implementation of this new strategy. They stand as follows:

Decisions

- Decision No 002/MINSANTE of 04/01/2016 determining the subsidized package of biological monitoring tests
- Decision No 1019/MINSANTE of 24/05/2016 setting the subsidized prices of biological monitoring tests

Circular letters

- CL NoD36-06/MINSANTE of 25/01/2016: routine diagnosis in health facility
- CL No D36-34 / MINSANTE of 24/05/2016: Care for people living with HIV prescribing immediately putting all persons tested and confirmed HIV+ under treatment with ARV without paying attention to their WHO clinical stage and the rate of CD4 lymphocytes, in order to implement the “Test and Treat” strategy recommended by WHO.
- CL No D36-35 / MINSANTE of 24/05/2016 on the plan for the selection of laboratories for the realization of BLOOD VIRAL LOAD: in keeping with the new country guidelines, the preferred test for the biological monitoring of people living with HIV who are treated with ARVs and BLOOD VIRAL LOAD. The patients’ blood samples will be taken in Care Units and authorized treatment centres depending on the former or competent laboratories. For patients whose samples are taken in ATCs/CUs, blood samples will be channeled to competent laboratories. The results of BLOOD VIRAL LOAD tests will be forwarded to the concerned health facility.
- CL No D36-35 / MINSANTE of 24/05/2016 on the deployment of pediatric psychosocial assistants: in the framework of the implementation of activities for the fight against HIV/AIDS, Pediatric Psychosocial Assistants (PSA Ped) have been recruited throughout the territory.
- CL No D36-57 / MINSANTE of 04/11/2016: appointment of Community-Based Organizations (CBO) for community dispensation of ARV
Annex 2: Community mobilization in order to identify the people to whom the interventions of the system are proposed

The target populations are made up of children and pregnant women, key populations (MSM, CSW and their clients, IUDs, prisoners), spouses of people living with HIV, and vulnerable young and adolescent girls.

These populations will be identified in the framework of all the interventions of health professionals and community actors.

Those people received diagnosis services through all interventions for prevention, care and treatment implemented by a health worker or a community actor. The issue is avoiding all missed opportunities and seizing all contact opportunities.

Annex 3: National HIV diagnosis for - Voluntary Testing. * Rapid serial tests (one after another), Rapid Diagnosis Test (RDT) 1 highly sensitive and Rapid Diagnosis Test (RDT) 2 highly specific

- **Before announcing the positive result, on the same day, repeat both tests following the same algorithm on the same sample with a different technician.

- * To be applied based on the availability of a 2nd technician in the laboratory.

- To be checked in a reference laboratory with the ELISA test or Repeat same algorithm 3 to 4 weeks later on a new sample
Annex 4: Terms of reference of retention committees in health facility

(TASK FORCE ON THE MONITORING AND RETENTION OF PATIENTS UNDER TREATMENT WITH ARV IN HEALTH FACILITIES)

➢ **Aim of the task force on the retention of patients under treatment with ARV**
  - Improve the rate of monitoring of people living with HIV who are under treatment

➢ **General objectives of the group**
  - Do the clinical and biological monitoring of complicated cases of people living with HIV who are under treatment with ARV;
  - Bring the number of missing patients below 10% in each care service;
  - Bring 100% of missing patients who are neither dead nor transferred “out” back to the active track;
  - For each health facility, increase the retention rate over 6, 12, 24 and 36 months to at least 75% by the end of 2016 and 80% by 2017;
  - Reduce shortage of stock in health facility to less than 5%.

➢ **Definition of key concepts**
  - Task force on the retention of patients under treatment with ARV: it is a redefinition/reorientation of therapeutic committees in health facility, which will thus change their name and objectives; of course, scientific discussion on the care given patients as well as those on the good functioning of CU/ATC may continue to take place there;
  - Absent: Patient under treatment with ARV, who was expected at the spot of dispensation of ARV, and who has not shown up during the month for the collection of his medication;
  - Missing patient: Patient under treatment with ARV who has not turned up to the ARV dispensation spot over the last three consecutive months;
  - Retention under treatment: Percentage of patients who have initiated treatment with ARV and are still on the same ARV treatment 12 months later.

➢ **Missions of the task force**

The task force on the retention of patients under treatment will be responsible for:

  - Defining an action plan for the prevention of missing patients and missed appointments in the health facility, in collaboration with all the actors of the fight in the health facility and the community;
  - Monitoring the strategies/actions put in place by the country (calls, reminder text messages, home visit) or define other additional strategies to adopt for the search of
absent and missing patients in the health facility (organization of the search for missing patients in the health facility);
- Take on monitoring-evaluation of the plan of action for prevention and actions taken to avoid missing patients or, if possible, bring them back on the active track;
- Discuss the results obtained after the implementation of the interventions for the retention of patients under treatment with ARV;
- Determine the profile of patients having gone out of the treatment track and determine the factors that influence the exit of patients under ARV from the treatment track.
- Collect, analyse and forward indicators related to the retention of patients under treatment with ARV every month to the RTG. Those indicators are: (i) number of external patients transferred during the month, (ii) number of deaths of patients under treatment with ARV during the month, (iii) number of missing patients recorded during the month, (iv) number of patients under treatment with ARV who were absent during the month, (v) number of missing patients brought back to the active track during the month.
- Discuss cases of therapeutic failure and change of treatment;
- Collect IAP in health facility and forward the report to the RTG;
- Analyse the reports of community workers and PSAs of the health facility and propose solutions.

➢ **Frequency of meetings**: Monthly.

➢ **Deliverables requested from each retention committee**
  o Attendance list;
  o Detailed monthly report containing a plan for the resolution of problems related to retention, to be forwarded to the RTG for monitoring of actions taken;
  o Number of external patients transferred during the month;
  o Number of deaths recorded of patients under treatment with ARV during the month;
  o Number of missing patients recorded during the month;
  o Number of patients under treatment with ARV who were absent during the month;
  o Number of missing patients brought back to the active track during the month;
  o Number of patients having done BLOOD VIRAL LOAD;
  o Number of patients with viral suppression;
  o Number of days of shortage of ARV in the health facility (product/product).

➢ **Composition of the task force**
All medical and paramedical staff working in ATC or CU, that is:

- ATC/ CU coordinators;
- Doctors working in health facility, in particular those posted in CU/ATC;
- Pharmacist or ARV dispenser;
- Therapeutic educators for adults and children/ adolescents;
- Staff in charge of filling logbooks;
- Psychosocial Assistant (PSA), formerly called ARC;
  - Staff in charge of pediatric care for HIV;
  - Staff in charge of PMCT in maternity and gynecology services;
  - Staff in charge of CDT;
  - If necessary, community actors.

NB: One meeting will be sponsored every term in each ATC (coffee break for 10 people) and in former CUs.
Annex 5: List of technical experts and stakeholders who contributed to the drafting of the guide

<table>
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<th>Organization</th>
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