



**Differentiated Models of HIV/TB Care in conflict and unstable settings:  
Community Antiretroviral Treatment Groups (CAGs) Pharmacy Fast track (PFT):  
Central African Republic (CAR)**

**MSF**

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**Toolkit**

**Programmatic Approach**

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### Acronyms

AIDS	Acquired immunodeficiency syndrome
ANC	Antenatal care
ARV	Antiretroviral drugs
ART	Antiretroviral treatment
CAGs	Community ART groups
CAR	Central African Republic
CHW	Community health worker
CoGes	Comite de Gestion
DRC	Democratic Republic of Congo
HIV	Human immunodeficiency virus
ID	Identification
IPD	Inpatients
OPD	Outpatients
MoH	Ministry of Health
MSF	Médecins Sans Frontières
NVP	Nevirapine
PFT	Pharmacy Fast Track
PLWHIV	People living with the human immunodeficiency virus
PMTCT	Prevention of Mother to Child Transmission of HIV
SSA	Sub-Saharan Africa

SOP	Standard Operation Procedures
TB	Tuberculosis
VL	Viral load test

## **Guideline outline:**

### **1. Introduction:**

The Central African Republic (CAR) has suffered chronic conflicts and prolonged health emergencies that are further exacerbated by recent cycles of violence associated with political instability. Health problems related to infectious diseases, maternal and pediatrics, contribute to a significant burden of disease in the country and represent continuous health priorities.

HIV and TB remain an exceptional crisis in CAR being leading causes of mortality amongst adults. CAR has an HIV prevalence of 4.9%, one of the highest in West Central African region and only 24 of PLWHIV are on antiretroviral treatment (ART) [1].

MSF supported integrated medical activities in Zemio (Haut-Mbomou), a rural town in the south-east of the country since 2011. MSF supported ambulatory care for a large cohort of people living with HIV/AIDS. This is the largest center providing access to antiretroviral therapy in the Haut-Mbomou region.

The MSF project in Zemio closed in December 2017 without a handover partner beyond the MoH. MSF had explored alternative simplified patient centered models of HIV care that the Ministry of Health (MoH) and HIV community could be able to run, to ensure sustainability of HIV care and good health outcomes.

MSF introduced differentiated models of HIV care (the CAGs and PFT) in Zemio (Haut-Mbomou) in late 2016 and Boguila (Ouham) in 2018, that proved successful in other sub-Saharan African countries, particularly in Mozambique, South Africa, Zimbabwe and the Democratic Republic of Congo (DRC) [2]. In CAR MSF has implemented community adherence/ART groups (CAGs) and Pharmacy Fast-track (PFT) linked to once-a-year consultations and annual viral load monitoring. Test and treat and linkage to the differentiated models of care reducing progression of HIV disease and related morbidity and mortality.

### **2. Aim of the guideline:**

This document is a product of MSF experience in programmatic implementation of Community ART Groups (CAGs) and Pharmacy Fast Track (PFT) in conflict and unstable settings in Zemio (Haut-Mbomou) and Boguila (Ouham) in CAR.

It provides the knowledge and tools required by staff (MSF/MoH and other stakeholders) to implement community models of HIV care (CAGs and PFT) including: set up, follow up, monitoring and evaluation in conflict/unstable settings.

*The document does not replace the existing HIV treatment guidelines, ART treatment should follow the existing updated national or international guidelines in place.*

## **Differentiated models of care:**

### **1. What are Community ART Groups (CAGs) and Pharmacy Fast Track (PFT)**

CAGs are self-formed groups of Stable HIV positive patients on antiretroviral treatment (ART) who live in the same geographical area. Members support each other by taking turns to collect ARV medicines at

the clinic pharmacy or dispensary and deliver in the community to the other members of the group and provide adherence support.

All the members of each CAG will receive a clinical consultation and a viral load test once a year on the same day at the HIV-OPD.

The members of each CAG with the support of their leader organize the delivery of the medicines to other members. To facilitate the distribution of ARV medicines in the groups, antiretroviral medicines are pre-packaged at the pharmacy/dispensary and labelled with the patient identification/name. In case of any medical problem, patients or the CAG leader will present at the clinic.

Pharmacy Fast Track (PFT) refers to stable patients who are not in CAGs either because they do not wish or because where they live there is none available, and who collect/ refill their ART drugs every 6 months and get a clinical consultation plus viral load test once a year at the health facility.

All stable patients in the MSF Zemio and Boguila HIV cohorts collect their HIV medication once every **six months**, delivered to them by at the HIV clinic dispensary/pharmacy.

### ***Drug Refills***

Drug refill for CAGs and PFT is done once every 6 months. This saves time and decreases the costs traveling to the clinic as well as providing contingency supply to minimize treatment interruptions if they face difficulties picking up drugs individually due to barriers such as insecurity, or lack of transportation.

### ***Viral Load (VL) Monitoring***

Viral load monitoring is a key component of the CAGs and PFT programmes to evaluate adherence to treatment of individual patients and overall treatment outcome of the programme. CAG/PFT members should ideally get a viral load test done at the time of entry into the CAG/PFT (baseline) if they are 6 months or more on ART. In case they have been less than 6 months on ART they do not get a VL (see criteria for entering CAGs/PFT). After entering the CAGs/PFT and baseline viral load is suppressed (<1000 copies/ml), monitoring will be done once a year.

Where baseline VL is > 1000 copies per ml, members will be referred for intensive adherence counselling and continue first line ART in CAGs for three months, after which VL will be repeated. If VL is still > 1000 copies/ml, they will be switched to second line ART and continue adherence counselling. They will be followed until 6 months when VL testing is done.

If suppressed, they will be eligible for 6-month supply in CAG/PFT model.

If not suppressed, additional adherence counselling will be necessary (see annex 3).

## **2. Why MSF Implemented CAGs and PFT in Zemio and Boguila?**

Patients in Zemio and Boguila, like in many other parts of CAR, encounter numerous barriers to access HIV treatment: insufficient number of clinics providing health care in general and even less HIV treatment, insecurity on roads, result in failure to get to the clinic in time due to living far away and lack of enough resources to maintain themselves in lifelong treatment.

At the same time the health system lacks the necessary capacity in form of skilled human resources, to provide the care to the growing numbers of HIV patients with very limited resources.

Several clinics and/or community-based strategies, such as decentralization of HIV services to health centres and health posts, providing drug supplies to patients for a long period and drug refills through fast track systems, adherence clubs, and community distribution points, have been implemented elsewhere in Sub Saharan Africa to reduce the burden on health workers and patients. Community ART Groups

(CAGs) in Zemio and Boguila are one of the strategies for ART distribution where patients voluntarily form groups and one or several members or a leader of the group, rotate to pick up the drug refills while dispensing drugs to their peers in the community and ensuring peer support and adherence, and all members of the group come to the clinic for consultation each year.

### 3. The Benefits of CAGs

#### *For the Patient:*

- Community ART groups (CAGs) facilitate access to ARV treatment to patients by reducing travel costs to the clinic and time invested during frequent clinic visits and waiting during consultations.
- CAGs encourage **peer support** at community level, enabling participation in own care, thereby facilitating a social fabric among patients and reducing perceived stigma.
- CAGs create **stronger community engagement** in HIV care with patients taking up critical roles in the delivery of ARTs in their communities.
- In addition, organised patient groups can form **an accountability mechanism** towards the health system, calling for adequate and quality services.
- In CAR specifically, CAGs can improve access to ART especially during periods of conflict and instability by ensuring; adequate supply of ART (**6 months**) to patients which also provide the patient with adequate contingency stocks to safeguard against treatment interruption.
- During conflict, the network of CAG leaders together with HIV clinic staff could ensure continuity of ART for group members.
- CAGs bring hope of life to PLWHIV particularly those that lost their loved ones.

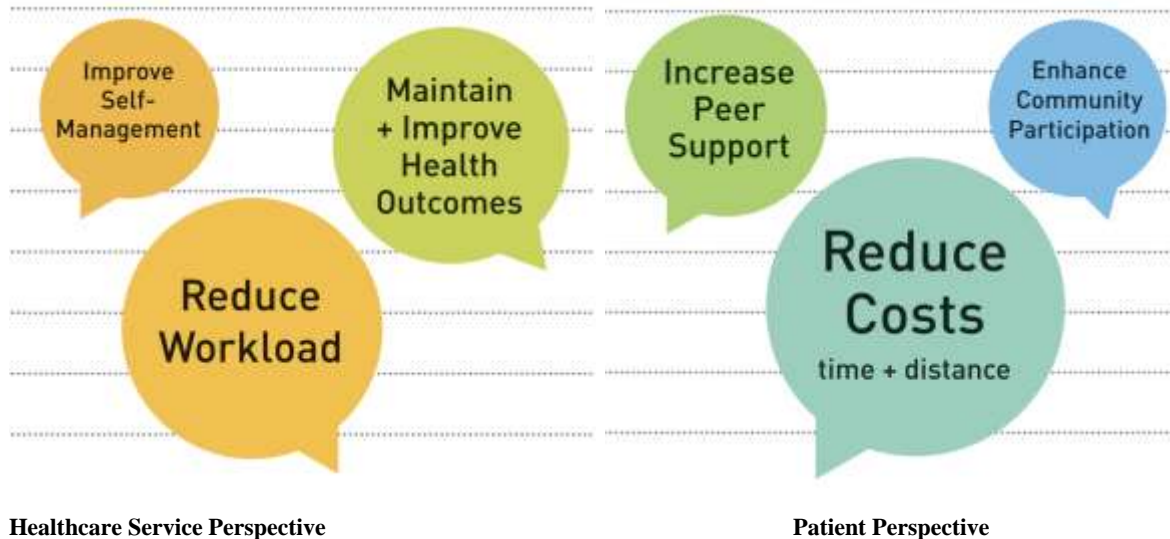
#### *For the health system*

- During the conflict in Zemio in 2017, most of the ministry of health (MoH) staff fled the area leaving behind a few staff members at the health facility, CAG leaders collaborated with the remaining few staff at the clinic and within the displacement camp to facilitated drug pickups for the patients.
- CAGs reduced the workload of the overburdened **healthcare system and care workers** by decreasing the number of patients attending the clinics individually, whilst achieving good health outcomes for patients and programme.
- The CAG model could help to nurture patient self-management and become less dependent on the healthcare system.
- The CAG model helps to decentralise HIV and healthcare to the community level.

#### *For the community*

- CAGs increase community engagement, by increasing awareness of HIV and visibility of PLWHIV in the community, resulting in stigma reduction and increased support from the community.
- Through regular meetings in the community, CAGs encourage peer support at community level including; adherence, support for the sick, transport facilitation etc.

#### 4. Objectives of CAG model [2]



### How to implement CAGs at health facilities

#### 1. Situation analysis

Before deciding to implement CAGs as a strategy for delivering ART in a specific setting, a careful analysis of the barriers to accessing ART services and retention in care is required. In Zemio these barriers were assessed through the morning **support group discussions** with patients and health care workers before the clinic day at the facility and an in-depth analysis of the existing Zemio HIV data.

There is '**no one size fits all**' strategy, therefore other strategies that may reduce barriers and burden for both patients and healthcare workers such as extending the duration of drug refills from 1 month to 3-6 months and access through '**Fast Track Service Systems**' at the health facility for quick delivery of drugs to stable patients on ARVs should be implemented.

The above strategy has been implemented in combination with CAGs in Zemio and Boguila in order to accommodate all patients' needs, especially for patients that do not choose to join the CAGs. MSF called this Fast Track service system, 'Pharmacy Fast Track' (PFT).

#### 2. CAG promotion

Sensitization of patients is key to the successful implementation of CAGs. The objective of health promotion is to ensure that PLWHIV and the whole community clearly understand CAGs and appreciate their benefits.

During health promotion, sensitization on CAGs and their benefits is emphasized. CAG promotion is achieved through different means. In MSF Zemio and Boguila projects MSF promoted CAGs through;

- **Support group discussions:** MSF took advantage of the existing support group meetings, held every morning before consultations to sensitize patients on CAGs.



- **Use of CAG leaflets:** Written information on CAGs and their benefits, available in three local languages (French and Sango). Leaflets are explained and distributed to patients through support groups, during consultations and through peer supporters. (Annex 6)
- **During consultations:** the consultant explains the benefit of CAGs to the patient using a CAG leaflet and gives additional leaflets to distribute to other patients and community.
- **Community Health Workers (CHWs) and other Lay workers:** CHWs and lay workers use CAG leaflets to sensitize the community, through drama, in churches, mosques, markets, community gatherings, schools and homes to pass on the messages about CAGs.
- **Peer educators<sup>1</sup>:** Expert patients sensitize other patients on CAGs. This method is very effective in forming on CAGs because patients know and believe in fellow peers.
- **Community Radio:** If available and feasible to use, a community radio is a very effective method to disseminate information widely about CAGs because of its wider range of coverage compared to other methods. For example, in Zemio MSF used clearly written messages that were aired as radio spots. Additionally, the HIV treating team organized radio program to discuss about CAGs, followed by question and answer sessions from the public. CAG Patients gave testimonies on the radio about their experiences, hence increasing awareness on CAGs.

## **Formation of CAGs**

### **1. Mapping**

The first step in the process of forming CAGs is for the health facility staff to map out all the patients according to their geographical origin or villages.

The main objective of mapping is to enable the health worker to get an idea of where patients are coming from to anticipate on the number of CAGs and the allocation process, i.e. patients living in similar or close localities/villages could be allocated to the same CAG.

#### **Sources of information:**

- Use the existing geographical information on patients from registers and databases.
- Mapping should be done by the HIV managing team with the support of someone with good knowledge of the areas.
- Peer educators can support the identification of networks of PLWHIV and give updated information about their location.

### **2. Patient List :**

Healthcare worker asks patients during consultation to contact other HIV positive patients known to them, discuss about CAGs, give information leaflet (annex 6) and if interested in joining CAGs, he/she lists them down, brings list to the clinic and a group appointment is given. Index patients go back to the community and contact all listed members to come to the facility together for more information and to form a group.

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<sup>1</sup> HIV positive patients going back to the community with leaflets and educating other patients about CAGs. In Boguila, trained peer educators sensitised PLHIV about CAGs in their communities.

### 3. Criteria for joining a CAG or PFT

In CAG model, stable patients are eligible to 6-months drug supply and annual consultations. Children, adolescents, pregnant women and stable patients on second line ART are also included.

Table 1: CAG/PFT eligibility criteria

Clinical criteria	Virological criteria	Catchment area
More than 6 months on ART	In places where viral load is available, it should be the standard criteria. Only patients with VL <1000 copies/ml should receive 6-months ART supply <sup>1</sup>  Patients with VL >1000 copies/ml should receive support from CAG peers, but have different schedule for consultations and drug pick-ups (see management of failures in annex 3)	Patients should be living in the same geographical area (group members living within 5km of each other)
Adherent to ART regimen: know their medication and taking it well in last 3 months		
No current illness or major opportunistic infection		
No tuberculosis <sup>2</sup> (if a CAG/PFT member develops TB, they should follow their TB treatment while in the CAG or PFT programme)		

<sup>1</sup> Viral load is not strictly considered as initial criteria because it may not be readily available in all settings during the roll out.

<sup>2</sup> TB patients are considered separately because they require regular visits to pick up TB medication dispensed differently as per TB guidelines.

Patients that were identified for a CAG but are unstable and therefore not eligible to 6-month drug delivery/annual consultation, can and should participate in the group meetings in the community to have peer support. This will help them regarding counseling, adherence and identification of warning signs that require an emergency visit to the clinic. However, they cannot receive 6 months drug supply and not considered to be in the CAG / PFT model (see annex 2).

#### Where viral load testing is available and implemented

- Ideally all members of the CAG should have a baseline viral load done prior to the activation day and entering a CAG. However, where viral load is not readily available, clinically stable patients on ART for more than 6 months (see Table 1) can enter a CAG.

Members with viral load > 1000 copies/ml will receive adherence and counselling support in the clinic and/or in the community by CAG peers. They will be followed up differently until their viral load is suppressed < 1000 copies/ml (Annex 3).

### 4. Contacting Members and Allocation to a CAG:

Patients self-form the group in the community after the clinic staff sensitizes the first patient during a consultation (Zemio) or through peer educators (Boguila) about CAGs with use of the CAG information leaflets. The clinic staff gives an appointment to the potential CAG to come to the clinic to officially form the group. This process of forming a CAG is called **CAG activation**.

### **5. CAG Activation Day**

On this day, all members forming the group come to the clinic to get more information on CAGs, adherence and their eligibility to join is assessed (see Table 1).

- Patients have baseline annual consultation.
- If viral load was done prior to joining the CAG, the results are informed and explained on this day.
- Individual eligibility is assessed:
  - If criteria met, eligible group members are dispensed 6-month supply of medication and given the same appointment in one year for drug pickup.
  - Non-eligible members are followed up according to their clinical status and viral load if available (annex 2). Once eligibility is met, they receive medication until the next drug pick up of the group they belong to.
- CAG members may select one or two representatives that will pick up medication at the next 6-month drug pick up.
- A same day annual group consultation and viral load testing appointment is given to the CAG. All members are required to attend in person on that day.
- If a member did not attend the meeting during the activation day, s/he still can join a group and should have the same dates for 6-month drug pick up and annual consultation.
- The CAG members agree on the frequency of monthly group meetings in the community.
- The use of the CAG Notebooks (Annex 7) to record issues arising from the CAG monthly meetings is explained to the group and a note book provided to the group /leader.
- Members of the CAG choose a leader for the group if not already done.

### **6. CAG Annual consultations and drug pickups**

The annual CAG clinical consultation is done once a year by the nurse at the clinic. All members of the CAG must attend in person with their treatment cards. CAGs receive results of their previously collected VL and new blood samples for viral load monitoring will be taken on the same day. This clinic meeting gives the group members the opportunity to meet and discuss their concerns with the clinic staff. All members pick up their 6-month ART supply in person and select a representative(s) who will pick up medication for the group during the next pickup.

In this occasion, the group can share with the clinic staff experiences and problems faced in the period and discuss solutions.

It is advisable to schedule the appointments for one week before the medication is finished to have a small buffer stock. Patients and groups should be oriented regarding these extra pills and avoid waiting until they are finished to attend the clinic. Failure to turn up in the health facility (for clinical appointment or pharmacy pick up) should be followed up by CAG leader/CHWs.

- A step by step summary guide for implementation of CAG/PFT can be found in annex 1.

## **How do CAGs Work?**

### **1. A CAG leader:**

CAG leaders are selected by the members of the group, usually on the day the CAG is activated at the health facility or in the community before the activation date. The role of the CAG leader is to lead the group and ensure members meet regularly in the community and take notes of their CAG activities and challenges in a CAG notebook (annex 7). If the leader is unable to take notes, he/she delegates another member of the group or, if not available, someone of their choice that does not belong to the group to take notes. The leader ensures the group organizes the 6-month drug pickup during the meetings and ensures members attend their annual group consultations in person and give blood for viral load testing. CAG leaders should be informed by other members regarding traveling plans or reasons to be absent to meetings or annual consultations. The CAG leader ensures members with high viral loads are timely informed to come to the clinic for further management (get intensive adherence counselling and/or switch to second line ART treatment).

### **2. CAG representative:**

A member or members of the group other than the CAG leader, chosen by the group or delegated by the leader to pick up medications on behalf of the group. Representatives are chosen during CAG activation, monthly meetings or during the annual consultation meeting.

The representative should be able to inform about the status of all members during the pharmacy 6-month pick up.

### **3. CAG community meetings:**

The CAG provides a means of accessing ART for the group members and a source of social support in the community.

The group should meet in the community before the drug refill when a representative (s) or CAG leader collects all the treatment cards from the members to bring to the facility to pick up the medication to deliver them after, either at the leader or member's home or at another agreed community venue (church or school or under a tree). There after meetings are held monthly at an agreed venue, date and time, until the next drug pick or annual appointment when all members come to the clinic.

During meetings, the CAG leader or a delegated representative will take notes in the CAG notebook. Members that are found to be sick and need to come to the facility are supported to do so immediately. Those that are not adhering to medications are advised and supported by the group.

Examples of topics to be addressed in the monthly meetings as suggested by groups in Zemio can be found in annex 8.

### **4. CAG Drug Pick Ups (Refills by CAG leader or representative):**

Six months after the CAG is activated, the CAG leader or agreed representative(s) comes to the clinic to pick up medication for the group. The CAG leader or representative comes straight to the pharmacy or dispensary with the CAG note book and treatment cards for all the members of the group and six months medication supply for the group members is dispensed.

All members are recorded in the pharmacy register and a 6 months appointment (annual consultation + viral loads) is reminded and proper instructions to the leader or representative are given.

A new or previous CAG note book is given to the group to complete during monthly meetings in the next period.

During this visit, the CAG leader/representative updates the health staff (pharmacist) about the general health situation of all members.

Special situations:

- Children younger than 10 years old should have their weight taken in a health facility near the patient (information to be written in the health card) to adjust medication dose if necessary. See annex 5.
- **CAG leaders should be aware of pregnant women and inform the clinic. During the 6-month drug pick up and annual consultation, nevirapine syrup should be dispensed to women in the 2<sup>nd</sup> and 3<sup>rd</sup> trimester of pregnancy that do not plan to deliver in a health facility that offers HIV services. This will enable prophylaxis to be given to the baby soon after birth (see annex 2).**

#### **5. CAG Annual consultation and ART refill:**

All CAG members come together to the health facility for the annual consultation and give blood for viral load monitoring. Members will see the nurse for individual consultation, counsellor for a group discussion on challenges faced during the period and Lab assistant to give blood for viral load.

Finally, members go to the pharmacy/dispensary to get their 6 months drug supply. The representative to pick up medication during the next refill can be agreed at this time or in one of the monthly meetings. A new annual consultation date will be given, and the CAG notebook exchanged for a new one.

Patients should be informed that they may need to return to the clinic bringing the medication dispensed in case of a high viral load (>1000 copies/ml).

**Special attention should be given at this moment for children regarding HIV status disclosure and ARV and cotrimoxazole (CTX) dose adjustment.**

**Nevirapine syrup may be dispensed to women in the 2<sup>nd</sup> and 3<sup>rd</sup> trimesters that do not plan to deliver in a health facility that offers HIV services. This will enable prophylaxis to be given to the baby soon after birth (see annex 2).**

#### **6. Health Facility Peer Volunteer (patient):**

PLWHIV that live close to the health facility could be asked to volunteer at the clinic to support on CAG related activities such as drug packaging and distribution to the CAG members during pickup, peer counselling and support. PMTCT counselling can be done in the ANC by HIV positive mothers that have gone through this service. This can help to increase the HR capacity of the MoH/CoGes.

### **How does the Pharmacy Fast Track (PFT) Work?**

PFT follows up stable patients that are not in CAGs either because they do not wish or because where they live there is none available, therefore both voluntarily or involuntary (for example stable patients where CAGs are not implemented). The inclusion criteria for PFT is like that of the CAGs (see Table 1).

Patients are followed up individually every 6 months for drug pickups at the pharmacy and medical consultation and viral load testing is done once a year. PFT patients benefit by not coming to the clinic frequently thereby saving the patients' time and travel costs and the 6-month drug supply provides a contingency stock for the patient in case of difficulties to come back to clinic.

Unlike the CAGs, PFT patients do not benefit from the group support on adherence to medication through regular meetings and the peer support in case they become seriously sick.

## Challenges of CAGs/PFT:

MSF faced several challenges while implementing the CAGs/PFT in Zemio, the first project to implement CAGs/PFT in CAR.

- Adequate pharmacy stocks and uninterrupted drug supply between the capital Bangui and the project Zemio. Supply chain weaknesses and breakdowns can lead to stock outs and these need to be critically monitored and timely reported especially in the beginning of the CAG implementation. It is important that the duration of drug supply is adapted to the patient's needs, both for those patients attending for their ART refill at the clinic as well as those in CAGs. This includes provision of medication with sufficiently long expiry dates, enough to be able to deliver to patients 6 months supplies at once.
- For CAGs to function well, new key tasks such as their formation, training, sensitisation/health promotion (patients and community) and monitoring of the groups need to be clearly explained to the staff (nurses and CoGes), and support from peer educators, peer volunteers and community health workers should be sought. (Annex 9)
- **Self-management** critically depends on the dynamic between group members and their leaders to ensure effective interaction for the group's adherence and ability to provide timely support to members whose health deteriorates in the community.
- **Simplified monitoring systems** with a minimum set of indicators are needed to ensure quality is maintained and to continuously support drug supply. Systematic supervision of the implementation and outcomes of the model should also be a prerequisite of any community-based model. See simplified CAG monitoring tools in annex 10.

Because of the above challenges MSF is adapting its CAG response in Boguila and other locations to maximise their potential benefits.

## Annexes: Protocols and Standard Operation Procedures

### Annex 1. Step by Step CAG/PFT Implementation model

1. Defining plan	
Identify the leading person that will be the local focal point and in charge of conducting analysis, proposing approach and reporting progress	
Assess current barriers for service delivery and resources available	Who are the staff involved in HIV activities? What is the main cause for patients to miss an appointment?
Define a clear schedule for implementation	Consider time necessary to order and receive supplies such as ARVs
2. Assessing resources needs	

Assess status and composition of the cohort before starting up	Updated number of active patients, age distribution, regimens in use
	Current patient flow
	Data collection process and data transfer, data collection challenges
Plan drug supply: pharmacy needs to be with enough medicines for delivery for 6 months with enough expiring dates	Forecast, plan and order in advance considering number of active patients and others (e.g. lost to follow up that return to care attracted by the new model)
Plan supplies for realization of viral load (if VL <1000 cp/mL is part of eligibility criteria)	
Define key staff in each department (clinic, pharmacy, laboratory, maternity, community)	Assign tasks to specific staff
	Identify training needs
Plan communication strategies to health staff and clients about differentiated models (sensitization): options available, how they work, who is eligible, who to contact	
3. Understanding client groups needs and barriers	
Identify with local staff and patient's possible groups, understand specific needs (e.g. children, pregnant/lactating women) and barriers for the implementation of the model	
Perform mapping with support of someone with good knowledge of the region and expert client	
4. Initiating implementation	
Have the eligibility criteria clear	
Train staff	CAG and PFT model: all staff, including general OPD and other departments
	How to conduct group counselling and health talks: clinical, community health workers
	Monitoring tools: clinical, pharmacy, maternity, laboratory
Promote CAG/PFT among clients (sensitization)	Health talks in the clinic waiting area
	Information during consultation

	Leaflets/posters with information about CAGs/PFT
	Education through peer educators
Perform viral load (if part of eligibility criteria)	CAG: invite pre-assigned group to attend the clinic in the same day as a group for consultation and activation
	PFT: invite for clinic when VL results are ready for consultation
Activation day	Meet patients – sensitization about the model, questions and answers session, meaning of VL and importance of adherence
	Meet group leaders – clarifications about their role, deliver CAG list and notebook
	Baseline consultation by the nurse – decision about who is eligible based on VL and/or clinical symptoms
	Set next date for annual consultation for the group
	6-month drug distribution in the pharmacy for those eligible
	Adherence counselling for those with high viral load and schedule return for 1-3 months
	Fill registration forms
5. Monitoring and evaluating the model	
Monitor key indicators: baseline values are needed	E.g.: proportion of drug pick-ups missed by clients over X time (CAG/PFT), retention in 12 months (CAG/PFT), proportion of patients with VL suppressed after 12 months (CAG/PFT)
Assess CAG notebook notes. Perform workshop with CAG leaders to address challenges faced and proposed solutions	



## Annex 2: Protocol for Management of New Patients and Patients with High Viral Load (“Pre-CAG”)

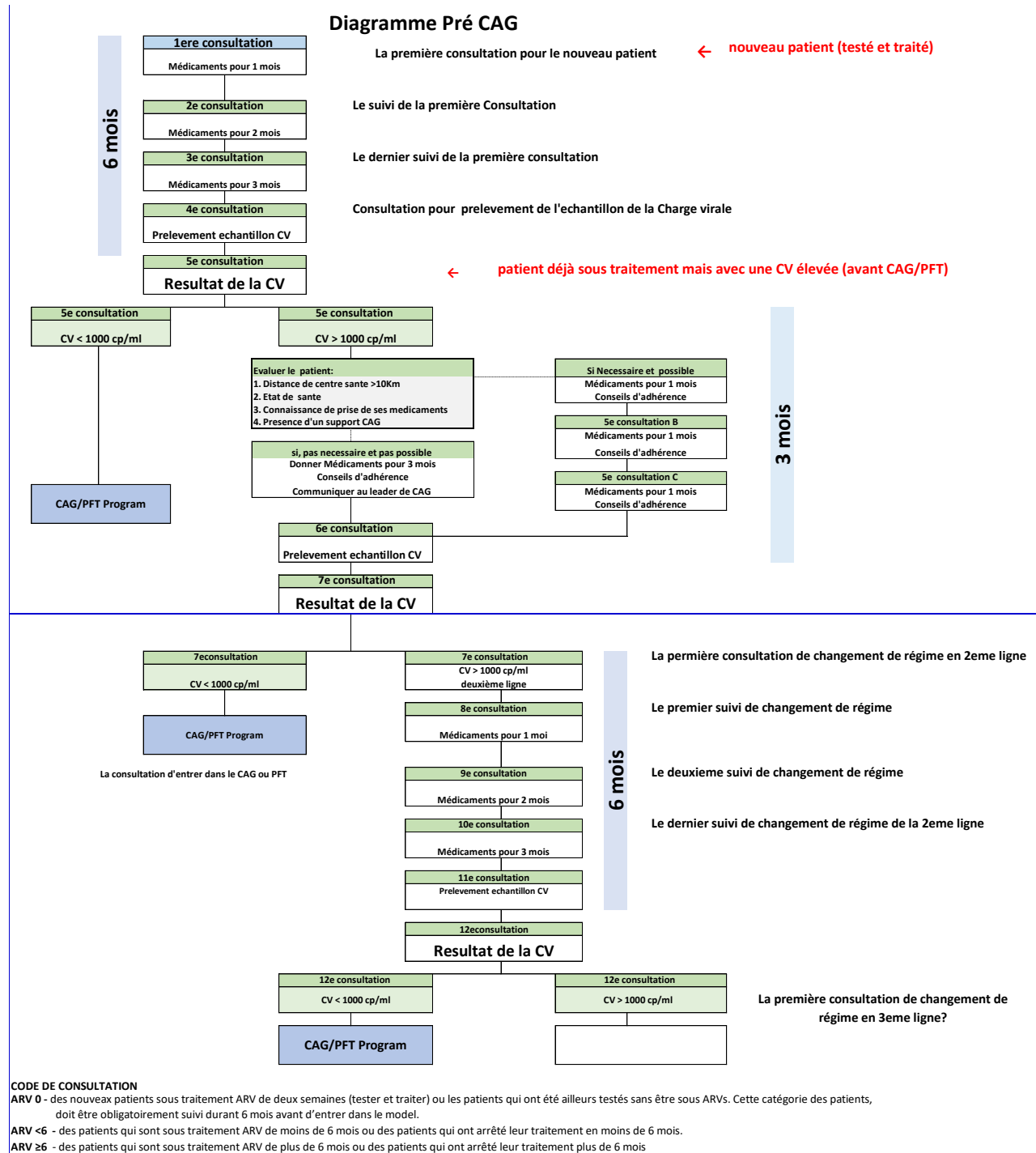


Figure 2.1: Diagram for management of new patients and patients with high viral load "Pre-CAG"

## 2.1. New Patient enrolled into the Program for less than 6 months including PMTCT

These patients neither fit into the criteria for CAG nor PFT. They should be managed according the test and treat protocol. Due to access challenges, follow up and drug pickups during this period can be simplified as in diagram (figure 2.1).

Patients that return to care after lost to follow up are included in this category and should restart the same ART regimen and have VL done after 6 months.

Pregnant women should be appropriately counselled about ART for life and for PMTCT including prophylaxis regimes, cotrimoxazole, breast feeding support and DBS for the baby at 6 weeks. Follow national PMTCT guidelines. If a woman is unable to deliver in a health facility that offers HIV services (due to distance, for example), nevirapine syrup use should be dispensed during consultation or drug pick up, so prophylaxis can be started soon after birth. Note that pregnancy is not an exclusion from CAGs, mother and baby pair can benefit from CAG support 6 months after entry into the programme or earlier after mother achieve viral load suppression.

Pregnant women will be discouraged from joining the Pharmacy fast track (PFT) programme despite demonstrating good adherence to treatment in the first 6 months, this is because in PFT patients follow treatment on their own and does not offer support from other patients as the case for CAGs. In this case patients are followed up individually after demonstrating virological suppression at 6 months (see PFT session for more details).

## 2.2. Follow up of new patients (Test and Treat and PMTCT)

After 1 month	Check adherence, side effects
After 2 months	Check adherence, side effects, discuss about differentiated models (CAGs/PFT)
After 3 months	Check viral load, if suppressed link to CAGs

## 2.3. Nevirapine syrup guidance

Nevirapine use and duration of prophylaxis should follow PMTCT national guidelines. It may be dispensed to women in the 2<sup>nd</sup> and 3<sup>rd</sup> trimesters that do not plan to deliver in a health facility that offers HIV services. This will enable prophylaxis to be given to the baby soon after birth.

Health staff should dispense NVP syrup with adequate number of syringes (e.g. ten) with a clear mark (made with adhesive tape, for example) that indicates the amount of 1.5 mL to be administered (figure 2.2).

Figure 2.2. WHO Simplified infant prophylaxis dosing

Infant age	Dosing of NVP
Birth to 6 weeks	
Birth weight 2000–2499 g <sup>a</sup>	10 mg once daily (1 ml of syrup once daily)
Birth weight ≥2500 g	15 mg once daily (1.5 ml of syrup once daily)
>6 weeks to 12 weeks	
	20 mg once daily (2 ml of syrup once daily or half a 50 mg tablet once daily)

<sup>a</sup> for infants weighing <2000 g and older than 35 weeks of gestational age, the suggested doses are: NVP 2 mg/kg per dose once daily. Premature infants younger than 35 weeks of gestational age should be dosed using expert guidance.

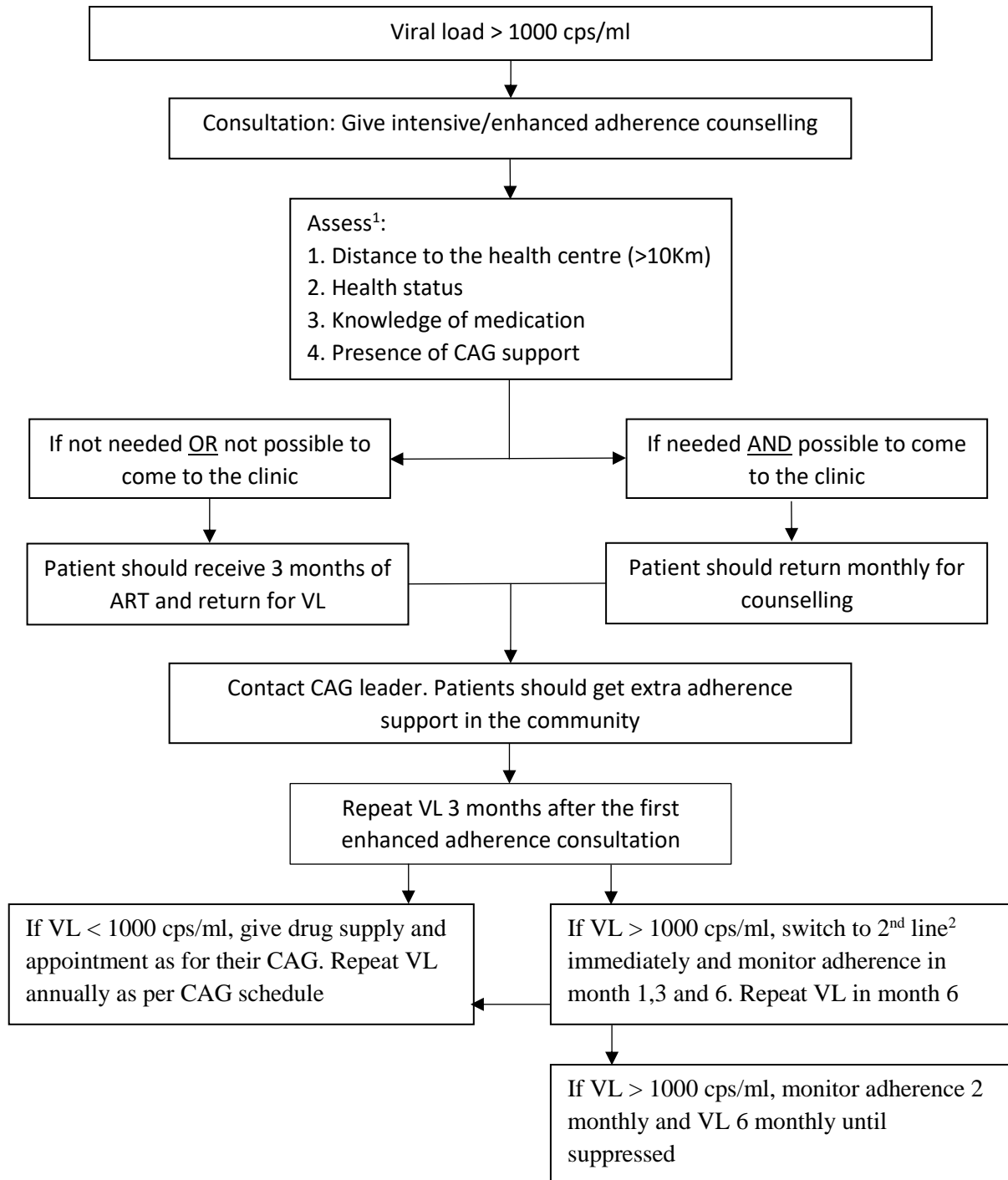
A leaflet with guidance about infant prophylaxis should be handed to the pregnant woman and CAG leader.

- Nevirapine syrup helps to prevent HIV to be transmitted to your baby
- It should be given immediately after birth, as soon as the baby is able to suck
- Give the necessary amount once a day, every day for 6 weeks (time may need to be prolonged to 12 weeks, discuss with health staff in the HIV clinic)
- In the next days after birth (preferably within 7 days), visit the clinic or health post for post-natal checkup, vaccinations and NVP dose adjustment if necessary. Bring the syrup, syringes and this leaflet for the health staff, so they can make the appropriated changes, if needed.
- At 6 weeks after birth, you must go to the HIV clinic for clinical assessment and testing of your baby.

Note for health staff to be included in the leaflet:

- Most babies will need to take 1.5 mL of syrup every day for 6 weeks.
- If baby weights less than 2.5 Kg, lower the amount for 1 mL (you are kindly requested to make a new mark in the syringes to help the family to administer the new dose correctly).

**Annex 3: Protocol for management of ART failures (patients with high VL and switch to 2nd line)**



<sup>1</sup> Patients that live close to the clinic, are not feeling healthy, may have difficulties in taking the medication even after enhanced counselling, and do not have CAG support should preferably come for monthly counselling in the clinic until the next VL.

<sup>2</sup> If patient is failing 2<sup>nd</sup> line, consult national guidelines for 3<sup>rd</sup> line switch.

### **3.1. Management and follow up of patients with high viral loads (VL more than 1000 copies per ml) in CAGs /PFT programme**

- These group members will be called back to the clinic
- These group members will be informed through the CAG leaders or peer educator by phone or letter
- Members will be offered enhanced adherence counselling monthly for 3 months according to **protocols in described in annex 4.1.a and b**, while continuing their first line regimens.
- Viral load will be repeated after 3 months of enhanced adherence counselling.
- On the VL appointment, take blood and provide 3 months first line treatment (or 2<sup>nd</sup> line, if patient already on this regimen) and one-month appointment.

#### **At 3 months:**

- If VL < 1000 copies, do not contact, let group member continue the 3 months ART until next appointment when results should be given and refer to CAGs. During this appointment, drug supply should correspond to the next appointment and drug pick up of the rest of the CAG members.

### **3.2. Switching to 2<sup>nd</sup> line (for counselling see annex 4.2)**

- If the VL >1000 copies after intensive adherence counselling means the CAG member has failed first line treatment. Contact the member through the CAG leaders and plan to switch to second line as soon as possible according to the national HIV clinical guidelines. All first line drugs should be brought back to the clinic.
- Where additional support on switching to second line is required, this should be sought immediately from the HIV doctor or the national HIV management team.
- Follow up on second line treatment on months 1,3 and 6, then do viral load.
- If VL is suppressed (VL<1000 copies per ml), refer to CAGs and continue treatment as per the CAG protocol of 6 monthly pickups.
- If not suppressed (VL>1000 copies per ml) continue adherence support and 2 monthly appointments and monitor viral load 6 monthly until suppressed.
- Such complicated patients should always be discussed with the HIV specialist advisor.

## **Annex 4: Protocol for Patient Support and Education Counselling for Patients with High Viral Load and/or Switching to 2<sup>nd</sup> line**

**A high viral load test result**, generally defined as a viral load of above 1000 copies/ml, is a strong indicator that a patient has problems to adhere to his treatment. While other reasons may explain a high viral load, adherence issues are the most common reason.

In the period between the first and the second viral load test (**usually around 3 months**), patient's adherence must be reinforced to ensure the viral load suppression.

In the absence of viral load monitoring, suspicion of immunologic failure (based on CD4) or clinical failure should be used as criteria for referral for EAC.

### **4.1. Enhanced Adherence and Counselling for Patients with High Viral Load**

Ideally, at least **3 EAC** sessions should be done with the patient upon receiving a viral load result above 1000 copies/ml. The first session needs to be offered the same day the viral load result is received. The second session is offered one month later and the third is offered during the second month before the 2<sup>nd</sup>

viral load is taken. Alternatively, the third session can be conducted the same day the second viral load is taken, to avoid delays. More sessions may be offered, according to the patient's needs.

However, it may not be possible for patients to attend frequently the clinic. Therefore, health staff should assess the need and feasibility of a person to attend the monthly consultations for adherence counselling. Distance to the health centre (>10Km), health status, knowledge of medication, and presence of CAG support should be considered (see annex 3).

Patients that live close to the clinic, are not feeling healthy, may have difficulties in taking the medication even after enhanced counselling, and do not have CAG support should preferably come for monthly counselling in the clinic until the next VL. Other patients should receive 3 months of ART and be supported by CAG group.

Patients with undetectable viral load can be identified in the group to support other members (how to take medications, strategies to keep adherence).

- **Group counselling:** In places where VL is implemented, patients returning for the results can have part of the adherence counselling done as a group (including CAG/PFT and unstable patients). Afterwards, counsellors will assess individually understanding and barriers, identifying strategies to improve adherence.

#### ***4.1.a. Enhanced Adherence Counselling 1***

**When:** On the same day the high viral load result is given to the patient.

**Mode:** Group + Individually

**Duration:** 40 min

#### **Objectives**

- Ensure patient's understanding of the VL testing result (or CD4) and most common reasons for a high viral load result.
- Identify barriers to adherence on behavioral, emotional, socio-economic and cognitive levels.
- Identify strategies to ensure good adherence to treatment.

#### **Topics**

- Give and explain the viral load result (Group)
- Explain the EAC procedure. (Group)
- Assess what the patient knows about causes of high VL and explain accordingly that an adherence problem is most often the cause for a high viral load. (Group + Individually)
- Explain that by solving the adherence problem, many patients come to an undetectable viral load within three months' time. (Group)
- Explain the flow of EAC sessions. (Group)
  - Assess previous medication adherence issues and recent adherence (use self-reporting tool). (Individually)
  - Explore barriers to adherence. (Individually)
- Explore knowledge gaps/cognitive barriers: understanding, beliefs (for example around traditional medicines, feeling sick...). (Group + Individually)

- Explore behavioral barriers (medication schedule, managing missed doses...) by using the adherence plan. (Group + Individually)
- Explore socio-economic barriers (disclosure, support, discrimination, income...). (Group + Individually)
- Explore emotional barriers. (Group + Individually)
  - Identify ways forward based on the problems identified. (Individually)

#### **4.1.b. Enhanced Adherence Counselling 2&3**

**When:** One & two months after the high viral load result is given to the patient.

**Mode:** Individually

**Duration** 40 min

**Objective** Evaluate strategies put in place to improve patient’s adherence.

#### **Topics**

- Assess patient’s adherence since the last EAC session.
- Evaluate the implementation of strategies put in place to improve adherence.
- Explain the next step in the EAC process (2<sup>nd</sup> viral load to be taken after 3 months) and the next steps depending on the 2<sup>nd</sup> VL result.

#### **4.1.c. Self-reported adherence assessment**

<b>Interview</b>	<b>Notes</b>	
Ask in a respectful and non-judgmental way:		
Introduction: Many patients have challenges taking their medications. What challenges are you having?"		
"Can you tell me when/how you take the pills?"		
When is the most difficult time for you to take the pills?"		
"It is sometimes difficult to take the pills on time? How many pills have you missed in the last 3 days?" [After patient answer] And in the last month?"		
<b>Medication Adherence Scale</b>	<b>Yes</b>	<b>No</b>
1. Do you ever forget to take your medicines?		
2. Are you careless at times about taking your medicines?		
3. When you feel better, do you sometimes stop taking your medicines?		
4. Sometimes if you feel worse when you take your medicines, do you stop taking them?		
<b>Conclusion</b>	<b>Yes, to one or more questions</b> <ul style="list-style-type: none"> <li>• support for improving adherence should be provided</li> </ul>	<b>No to all questions;</b> <ul style="list-style-type: none"> <li>• Good adherence</li> </ul>

## 4.2. Counselling and education for patients that are switching to second-line ART

After a patient went through the process of EAC and a second viral load has been taken, the nurse may confirm the patient has treatment failure – meaning the patient became resistant to ARVs and is no longer able to fight HIV with the first line/current treatment. The patient may be switched to second line ART.

- **One session at 2<sup>nd</sup> line ART initiation should be offered, to discuss the following topics:**
  - Explain the reason for the change.
  - Explain the functioning of second-line treatment.
  - Explain dose and time management of second-line medication.
  - Assess patient's readiness to start treatment.
  - Explain the goal of reaching an undetectable viral load.
  - Implement strategies for good adherence (medication schedule, storing of drugs, managing missed doses).
  - Second line follow-up counselling sessions should be planned until a first viral load at month 6 is taken, **at month 1, 3 and 6** addressing following topics:
    - Identify any barriers to his adherence.
    - Identify strategies to ensure good adherence to his treatment.
  - After month 6 **another VL test** will help assess whether the patient needs further enhanced adherence counselling.
  - Link to CAGs for additional support from group members/CAG leader

## Annex 5: Children in CAG

Infants under the age of 18 months should be tested according to the early infant diagnostic algorithm (check national protocol). In CAR, exposed infants should have their first PCR test at 6 weeks of life. RDT should be performed at 9 months and at 18 months (or 3 months after stopping breastfeeding). Under 18 months, any positive RDT should be confirmed with PCR, due to maternal HIV antibodies still being present in the infant's blood. Any infant presenting with symptoms or signs of presumptive HIV should be tested at any time.

If PCR is positive, start treatment immediately and collect another sample for PCR for confirmation within 1 month of the result (preferably in the same day).

Once clinically stable, children can benefit from access to CAG/PFT. Services should be tailored to keep families together as much as possible to simplify access and reduce costs. PFT is discouraged though due to the lack of community support.

There are two factors specific for this population:

- Young children may require changes in the dose/regimen
- Age appropriate disclosure of child's HIV status should be done, as it strongly supports sustained adherence.

In theory, only five changes in ART dose are expected before age 10 years:

- three months
- one year
- three years
- five years
- seven years



For cotrimoxazole (CTX), only one dosage adjustment is required between 10 and 19.9 kg (table 5.4).

Age-appropriate disclosure is encouraged and caregiver orientation to the disclosure process should be complete. Despite that, disclosure should not be required for participating in differentiated service delivery models.

During annual consultations, it is important to check immunization status and complete any missed vaccines. **Malnourished children are not considered stable** and need to be managed accordingly before joining and during CAGs.

### 5.1. Adherence to ART

The ability of children and adolescents to take their ART effectively is dependent on many psychosocial factors outside their direct control. The ability of their primary caregivers to take responsibility for their healthcare is particularly important.

Treatment failure rate for children and adolescents with HIV is much higher than in adults. Although great strides have been made in the field of paediatric HIV over the last 15 years, many problems with paediatric HIV treatment remain, and often place children and adolescents at risk for failing their treatment. These problems include:

- The small number of available ARVs for children;
- The unpleasant taste of existing ARVs;
- A lack of research and development for paediatric ARVs;
- Dosing complications with paediatric ARVs; and
- The many psychosocial issues surrounding the administration of chronic lifelong medication and maintaining long term adherence.

Table 5.1. summarize these causes.

*Table 5.1: Factors contributing to a high viral load in a child*

Entity	Cause of high viral load
<b>Clinician responsible</b>	Not double-dosing LPV/r with rifampicin
	Not increasing the dose as a child gains weight
	Not switching to valproate if patient epileptic
	Not detecting and advising patient if there is significant diarrhea and/or vomiting
	Clinician not detecting mental illness or substance abuse and making efforts to help
<b>Health system responsible (a few examples)</b>	Poor counselling strategies resulting in inadequate advice to start with
	Poor mechanisms for lost-to-follow-up tracing
	Little opportunity for patient to ask questions or raise concerns

	Drug stock-outs
	Poor clinic management of viral load results
	Complicated treatment regimes
	Unpleasant taste of drugs
<b>Patient-related</b>	Treatment fatigue
	Food insecurity
	Stigma
	Alcohol or substance abuse
	No treatment supporter
	Unwell/irresponsible caregiver
	Disclosure issues
	Unstable home life

**5.2. Guidance for ARV dose changes for children in CAGs**

All possible efforts should be made to weight children before the 6-month drug pick up. This can be done in a health post closer to the community and registered in the health card. Failure to gain or decrease in weight should prompt immediate investigation.

If the information is not available, the following general rule can be used for **healthy** children less than 10 years old:

- ≤20Kg: 1Kg increase every 6 months
- >20Kg: 2Kg increase every 6 months

If a child weight is close to the next weight band dose, it should be prescribed as for the next. For example: during the annual consultation a child is 19.8 Kg and currently in use of AZT/3TC/NVP 2.5 dispersible tablets twice a day. For the next 6 months pick up, it should be prescribed 3 tables twice a day (20-24.9kg weight band). See tables 5.2 and 5.3.

**Table 5.2: WHO Simplified dosing of child-friendly fixed-dose solid formulations for twice-daily dosing for infants and children 4 weeks of age and older\* [3]**

Drug	Strength of tablets (mg)	Number of tablets by weight band morning and evening										Strength of adult tablet (mg)	Number of tablets by weight band	
		3.0–5.9 kg		6.0–9.9 kg		10.0–13.9 kg		14.0–19.9 kg		20.0–24.9 kg			25.0–34.9 kg	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM		AM	PM
AZT/3TC <sup>a</sup>	Tablet (dispersible) 60 mg/30 mg	1	1	1.5	1.5	2	2	2.5	2.5	3	3	300 mg/150 mg	1	1
AZT/3TC/NVP <sup>a</sup>	Tablet (dispersible) 60 mg/30 mg/50 mg	1	1	1.5	1.5	2	2	2.5	2.5	3	3	300 mg/150 mg/200 mg	1	1
ABC/3TC	Tablet (dispersible) 60 mg/30 mg	1	1	1.5	1.5	2	2	2.5	2.5	3	3	600 mg/300 mg	0.5	0.5
ABC/3TC	Tablet (dispersible) 120/60 mg	0.5	0.5	0.5	1	1	1	1.5	1.5	1.5	1.5	600 mg/300 mg	0.5	0.5

\* For infants younger than 4 weeks of age, consult guidelines for more accurate dosing.

**Table 5.3: WHO Simplified dosing of child-friendly solid and oral liquid formulations for once daily dosing for infants and children 4 weeks of age and older<sup>a</sup>**

Drug	Strength of tablet (mg)	Number of tablets or capsules by weight band once daily					Strength of adult tablet (mg)	Number of tablets or capsules by weight band once daily
		3.0–5.9 kg	6.0–9.9 kg	10.0–13.9 kg	14.0–19.9 kg	20.0–24.9 kg		25.0–34.9 kg
EFV <sup>b</sup>	Tablet (scored) 200 mg	–	–	1	1.5	1.5	200 mg	2
ABC/3TC	Tablet (dispersible) 60/30 mg	2	3	4	5	6	600 mg/300 mg	1
ABC/3TC	Tablet (dispersible) 120/60 mg	1	1.5	2	2.5	3	600 mg/300 mg	1
ATV <sup>c</sup>	Capsules 100 mg	–	–	1	2	2	300 mg	2 (100 mg) <sup>d</sup> or 1 (300 mg)
TDF <sup>e</sup>	Oral powder scoops 40 mg/scoop	–	–	3	–	–	300 mg	1 (200 mg) <sup>d</sup> or 1 (300 mg)
	Tablets 150 mg or 200 mg	–	–	–	1 (150 mg)	1 (200 mg)		

<sup>a</sup> For infants younger than 4 weeks of age, consult guidelines for more accurate dosing.

<sup>b</sup> EFV is not recommended for children younger than 3 years and weighing less than 10 kg.

<sup>c</sup> ATV is only approved for use for children 3 months and older. ATV single-strength capsules should be administered with RTV 100 mg for all weight bands.

<sup>d</sup> 200 mg should be used for weight 25.0–29.9 kg and 300-mg tablets for 30.0–34.9 kg.

<sup>e</sup> TDF is only approved for use for children 2 years and older.

**Table 5.4: WHO Simplified dosing of isoniazid and co-trimoxazole prophylaxis for infants and children who are at least 4 weeks of age**

Drug	Strength of tablet or oral liquid (mg or mg/5ml)	Number of tablets or millilitres by weight band once daily					Strength of adult tablet (mg)	Number of tablets by weight band
		3.0–5.9 kg	6.0–9.9 kg	10.0–13.9 kg	14.0–19.9 kg	20.0–24.9 kg		
Isoniazid	100 mg	0.5	1	1.5	2	2.5	300 mg	1
Co-trimoxazole	Suspension 200/40 per 5 ml	2.5 ml	5 ml	5 ml	10 ml	10 ml	–	–
	Tablets (dispersible) 100/20 mg	1	2	2	4	4	–	–
	Tablets (scored) 400/80 mg	–	0.5	0.5	1	1	400 mg/80 mg	2
	Tablets (scored) 800/160 mg	–	–	–	0.5	0.5	800 mg/160 mg	1

## Annex 6: CAG Leaflets

### 6a. In French

#### QU'EST-CE QUE LE CAG ?

CAG signifie "Groupe communautaire d'ARV". Il s'agit d'un groupe de patients séropositifs, qui s'organisent, se réunissent volontairement, se soutiennent et choisissent entre eux un responsable de leur groupe capable d'assurer l'approvisionnement des médicaments, antirétroviraux (ARV) depuis le centre de santé de Boguila vers la communauté afin de les distribuer à chaque patient membre de son groupe.

#### COMMENT ÇA MARCHE ?

Chaque membre vient à la consultation une fois par an, le même jour que tous les autres membres de son groupe, il en profite pour un contrôle général, les analyses sanguines et une discussion avec un (e) conseiller (e).

Pour l'approvisionnement du traitement, un membre désigné viendra à Boguila prendre les médicaments pour tous les membres de son groupe qui contribuent au coût du transport.

Les membres du groupe doivent se réunir régulièrement une fois par mois pour discuter de leurs problèmes et s'assurer que chacun d'entre eux prenne correctement son traitement.

#### LE DEVOIR DES PATIENTS...

Le CAG est un groupe de support mutuel. Au sein du groupe:

- Les membres s'encouragent mutuellement pour toutes les activités liées à la prise en charge
- Partagent avec les autres les expériences vécues (bonnes et mauvaises)
- Contribuent au coût de transport des médicaments (du centre de santé vers le village)

#### RECOMMANDATIONS POUR LE BÉNÉFICIAIRE

- Rencontres régulières avec tous les membres de sa communauté
- Discussion autour des difficultés rencontrées
- Un groupe CAG est totalement volontaire et dépend de votre disponibilité

#### LES AVANTAGES POUR LES PATIENTS

- Vous ne viendrez au centre de traitement qu'une fois par an.
- Vous économiserez sur les coûts de transport parce que vous viendrez au centre de traitement moins souvent.
- Vous connaîtrez d'autres patients et obtiendrez aussi leur soutien.
- Vous recevrez régulièrement et gratuitement les médicaments pour six mois.
- Vous réduirez les risques de ruptures de médicaments.

#### CAG COMMENT ÇA SE PASSE ?



Le personnel soignant est toujours disponible pour les conseils.



Consultation régulière des membres du CAG.



Le personnel soignant prépare les médicaments pour l'approvisionnement du groupe CAG.



Un membre du groupe emballe les médicaments sur le moto pour les transporter.



Un membre du groupe transporte les médicaments vers sa communauté.



Les membres du groupe se réunissent régulièrement pour discuter et s'encourager mutuellement.



## QU'EST-CE QU'UN GROUPE COMMUNAUTAIRE "CAG" ?



Le " Groupe communautaire d'ARV " (CAG) est un groupe de volontaires vivant avec le VIH qui s'organisent, se réunissent, se soutiennent afin d'assurer leur approvisionnement des médicaments antirétroviraux (ARV) depuis le centre de santé de Boguila vers la communauté pour les distribuer à chacun des patients du groupe.



### CAG a yékè gnin ?

CAG a yeke bombi ti a zo ti kodro oko so a yé da na bè ti ala ti douti na ndo oko, ti mou maboko na légué ti ouarango yoro ti kanga légué na makongo ti sionga hozo.

Na ya ti bombi ti CAG, mo yéké ouara moungo maboko ti a mbéni zo so nga a yéké na makongo ti sionga hozo tongana mo.

Mo yéké si na da nganga gui fani oko na ya ti ngou oko. Gui mbéni zo so bombi ti CAG ti mo à sôro lo si lo yéké goé na da nganga ti Boguila ti mou yoro ti mo, nga na ti a zo kwé so a yéké na ya ti bombi ti CAG ti kangbi ni na ala.



## 6b. In Sango

### CAG A YÉKÉ GNIN ?

CAG a yeke bombi ti a zo ti kodro oko so a yeke na makongo ti sionga hozo, so a yé da na bè ti ala ti douti na ndo oko, ti mou maboko na légué ti ouarango yoro ti kanga légué na makongo ti sionga hozo. Ayeke azo ti kobela so a ye da ti mou yoro ti goué na ni ti kangbi na ambéni zo ti kobela na ya ti akodro ti ala. Na nga ti sala si azo ti kobela ni a goué lakoué lakoué na da nganga pépé ti mou yoro.

### CAG A TAMBOULA TONGANA GNIN?

Fadé azo ti kobéla koué a goué légué oko na ya ti ngou oko na da nganga.

Azo ti kangbingo yoro nga asala gui tonga so, maia ala mou mbéni lango oko si ala koué agoué légué oko, si wa kodé koa ti sèni a lingbi ti ba ya ti méné ti ala na nga si ala lingbi ti pika patara na wa moungo ouango ti ala.

Fadé a membre ti a bombi oko-oko koué ayeke mou maboko béti foutango légué ti membre ti bombi ti ala.

A lingbi azo koué so ayeke na ya bombi so ouara téré ti ala légué oko na ya nzé oko ti gbou ti ti ala na ndo ti a kpalé ti ala na ti hinga tonga na azo koué ayeke mou tonga ti ala nzoni.

### YE SO E YEKE KOU NA MBAGUE TI AZO TI KOBELA

- A yeke ti hinga so bombi so a yeke ti mou maboko na popo ti azo ti kobéla oko-oko koué, na nga tonga na mbéni zo a yeke na kobéla fadé mbéni agoué na place ti lo nga.
- Ti kangbi na a ita ti lo so lo nga lo yéké na kobéla tonga na ala.
- Ti mou maboko na zo so ayeke goué ti mou yoro ti bombi ti ala.
- Ti goué na ngbonga so wa kodé koa ti sèni a hounda na mo si ga ti ba lo.

### KOUSSALA SO AJO TI KOBELA ALINGBI TI SALA

- Fadé ala yeke ga gui légué-oko na ya ti ngou oko ti mou yoro.
- Fadé ala yeke bata koforo ti ala si ala fouta nguza ti légué mingui pépé.
- Nga ti manda na ti mou maboko na a mbéni zo ti kobéla.

### NZONI PASSA NI AYEKE TI SO

- Fadé ala yéké ga gui légué-oko na ya ngou oko ti mou yoro.
- Fadé ala yéké bata koforo ti ala si ala fouta nguza ti légué mingui pépé.
- Nga ti manda na nga ti mou maboko na a mbéni zo ti kobéla.

### CAG COMMENT ÇA SE PASSE?



Moungo wango na da nganga



Mbongo mbéni ti sango ye ni



L'ambéngo yoro ni, si zo ni a mou ti goué na ni na a membre ti CAG



Mbéni zo ti CAG a yéké kanga a yoro so ti goué ti kangbi ni a membre ti CAG



Gouéngé na a yoro na kodro



Bombi ti a membre ti CAG



## Annex 7: CAG Notebooks

### 7a. Content of CAG notebooks

#### Contenu des cahiers de CAG

NB : Ce document devra être placé en début de cahier afin que le leader du CAG puisse s'y référer à chaque mise à jour.

Nom du CAG:

*Veillez utiliser les sujets ci-dessous comme un guide chaque fois que vous mettez à jour le cahier de votre CAG. Le cahier doit être actualisé :*

- Mensuellement *ET / QU*
- Après chaque réunion du CAG *ET/ QU*
- Quand il y a des problèmes spécifiques à noter.

1. Date de mise à jour/ réunion du CAG :
2. Nombre de membres actifs au moment de la mise à jour :
3. Nombre de nouveaux membres depuis la dernière mise à jour :
4. Nombre de membres ayant quitté le CAG depuis la dernière mise à jour :
5. Raisons pour lesquelles les membres ont quitté le CAG :  
*Veillez noter le code du patient, la date et la raison.*

Défauts	.....
CAG transféré	.....
Zone abandonnée	.....
Décès	.....
Autre	.....
Raison inconnue	.....

6. Nombre de membres présents à cette réunion :
7. Problèmes vécus par les membres du CAG :  
*Veillez noter librement en considérant les questions suivantes :*
  - a. L'adhérence au traitement
  - b. Le statut de la santé
  - c. La sécurité
  - d. Les dynamiques au sein du CAG
  - e. Autres

8. Solutions Proposées ou trouvées :

9. Expériences positives des membres du CAG :  
*Veillez noter librement en considérant les questions suivantes :*
  - a. L'adhérence au traitement
  - b. Le statut de la santé
  - c. La sécurité
  - d. Les dynamiques au sein du CAG
  - e. Autres

Autres observations ou commentaires :

*Merci pour la mise à jour du cahier de votre CAG. Si vous avez des questions par rapport à son utilisation, nous vous prions de contacter un/une membre de l'équipe du Ministère de la Santé ou d'appeler Peeters .....*

## 7b. Factsheet about CAG notebooks

**Fiche d'information sur les cahiers des CAG**

Date .....

Nom du CAG ..... Nom du responsable .....

---

Notre objectif est de proposer un système de cahiers de CAG pour faciliter la communication entre leaders de CAG et permettre au Ministère de la Santé, avec l'aide de MSF, de les soutenir de la façon la plus adaptée.


*Que sont les cahiers des CAG ?*  
Chaque leader de CAG recevrait un carnet avec un contenu simple à mettre à jour (comme dans l'exemple) régulièrement. Le but est de documenter le statut de chaque CAG, les défis et les expériences positives, ainsi que toutes suggestions pour le futur. Une fois fini, le carnet serait remplacé par un nouveau.

*Quel est l'objectif du cahier de CAG ?*  
L'objectif du cahier est de documenter les expériences de votre CAG :

- Afin que l'équipe du Ministère de la Santé, avec l'aide de MSF, puisse comprendre le statut des CAG et les soutenir de la meilleure des manières.
- Afin d'avoir un rapport du fonctionnement des CAG et de savoir comment ils contribuent à la connaissance et comment ils peuvent être mis en place dans d'autres contextes tels que Zemio.

*Quelles sont les responsabilités des leaders des CAG ?*  
Les leaders des CAG sont chargés de :

- Obtenir l'autorisation des membres du CAG pour documenter leurs expériences dans ces cahiers.
- Mettre à jour le cahier ou alors déléguer cette tâche à un autre membre du groupe :



- Mensuellement et/ou
- Après chaque réunion de CAG et/ou
- Lorsque des problèmes spécifiques se présentent

- Garder le cahier en sécurité
- Communiquer le moindre problème à l'infirmière VIH et/ou le conseiller
- Echanger le cahier pour un nouveau :
  - A chaque prise de médicaments (tous les 6 mois), ou
  - Lorsque le cahier est plein, ou
  - Lorsque le CAG souhaite communiquer des informations spécifiques.

**Le choix de tenir un cahier de CAG est entièrement volontaire ; il revient à chaque CAG d'en décider.**

*Avez-vous de quelques interrogations, problèmes ?*  
Nous vous prions de contacter un/une membre de l'équipe du Ministère de la Santé ou d'appeler Peeters, l'infirmière VIH de MSF pour.....

*Envisagez-vous de tenir un cahier pour votre CAG ?*

Oui

Non

Incertain(e)

Une fois que nous aurons répondu à toutes vos questions et que vous estimerez avoir suffisamment d'informations pour prendre une décision, nous vous prions de contacter un représentant MSF ou Ministère de la Santé si vous souhaitez tenir un cahier pour votre CAG.

*Nous vous remercions d'avoir pris le temps d'écouter les explications sur notre système de cahiers / d'avoir accepté de tenir un cahier de CAG.*

Nom de la personne qui donne l'explication : .....

## Annex 8: CAG Meetings – Suggestions

In Zemio, CAG leaders and members made a list of topics they considered were important to be addressed based on their experience and to serve as a guide to other groups. The list is not extensive and is presented only as a suggestion, groups should be free to organize themselves in their best interest.

At the beginning of the group:

- **All members should meet each other since the beginning of the CAG** (ground rule)
  - a. If a new member joins, plan how the introduction will be
- Members should think carefully about the group they want to join to prevent future difficulties. Changes must be communicated to the clinic (MoH/MSF)
- Members should be aware that if they don't attend the monthly meeting it may be difficult for them to receive the medication, as the health cards and drugs plans are handled in these occasions (meetings)
  - a. If someone does not attend in the meeting, the group need to agree on how the health card pick up and the drug delivery for the missing member will happen.
- Discuss and decide if there will be a common fund for the drug pick up at 6 months.

Topics:

- Each member share experiences and offer mutual support

- a. About general health status
  - b. About challenges faced
  - c. How they are taking the medication and adherence issues
- Offer mutual support regarding issues of alcohol and tobacco
- General health talk on how to prevent diseases
- Meaning of viral load and why it is important
- Adherence support for patients that had a high viral load
  - a. Members with undetectable viral load can be a role model for the group
- Pregnant, lactating women and children are known
  - a. Group encourage and support their treatment
  - b. Women are encouraged to deliver in a health facility and initiate nevirapine syrup for the baby immediately after birth
  - c. Assistance to regularly weight children
    - i. If a child's weight rapidly decreases, it is important to inform the clinic
    - ii. Efforts should be made for at least weight before the 6-month drug pick up

Meetings:

- If necessary, courtesy visits to other members are encouraged
- Leaders (or other appointed person) should know the dates of consultations of all members
  - a. It is a group responsibility to remind about medical appointments and to be punctual
- Leaders (or other appointed person) should inform other members of any urgent matters and request an extraordinary meeting if necessary

## **Annex 9: Sensitization and Trainings**

At the start of the implementation process, health staff should receive training on how to use the CAG/PFT model (toolkit). The training curriculum should include the following content:

### **9.1. Sensitization**

Target: All PLWHIV

Where: Clinic support group meetings

When: Before CAG formations (e.g. during VL collection) + CAG activation day

- Explanation of the community model of care and advantages of the CAGs (CAG leaflets, annex 6)
- Discussion on eligibility criteria to enter CAG
- Interpretation of VL results and importance of adherence to ART
- How the unstable/new patients are followed up before joining CAG
- Sharing experiences between the patients
- Training on the importance of sharing information and how best to use notebooks
- Importance of sensitization
- Distribution of the leaflets in Sango and French
- Next plan for CAGS activation



### *Additional for CAG leaders*

- Discussion on how best to manage the CAGs
- Discussion on management of patients with high VL and how to promote adherence
- Key aspects of pharmacy, maternity and health promotion related to HIV/CAG
- Detailed training on how to fill the notebooks provided to the team leaders

### *After implementation (e.g. at 6-month drug pick up or annual consultation)*

- CAG leaders share their experience
- Discussion of how to best manage CAGs
- Refreshment about key aspects from the pharmacy, maternity and health promotion related to HIV/CAG

## **9.2. Training on CAG/PFT Toolkit**

Target: Health staff that have activities related to CAG/PFT (nurse, counsellor, laboratory, maternity, pharmacy, health promotion team/CHW).

For health staff not directly involved in CAG/PFT (e.g. OPD, IPD, nutrition ward)

Where: Clinic

When: Before CAG formation

- General training on the CAG/PFT toolkit
  - o What are CAG/PFT?
  - o Benefits of CAGs
  - o Objectives of CAG model
  - o How to implement
  - o Formation of CAGs
  - o Eligibility criteria
  - o How CAGs work
  - o How PFT work
  - o Challenges
  - o Importance of data collection and communication between different departments
  - o How to fill data collections forms and registries (for CAG/PFT related staff only)
- HIV general topic
  - o ARV treatment
  - o VL and PCR test management
  - o Counselling and adherence

## **Annex 10: Monitoring and Evaluation**

Data collection and analysis is essential for the program to determine if the objectives have been met and outcomes achieved. Indicators help to understand what happened or changed with the implementation and comprehend how these changes happened. This allows the program to adjust improve its implementation and assure quality.

Table 10.1 show examples of indicators that can be used to evaluate the CAG/PFT program.

*Table 10.1 Indicators for CAG/PFT program*

<b>Indicator</b>	<b>Indicator description</b>	<b>Target</b>
12-month retention in care among patients in CAGs	Number of patients who are still active in CAGs 12 months after enrolment to the total number of patients enrolled in CAGs 12 months prior to the reporting period (*100)	>95%
Overall retention in care among patients in CAGs	Number of active patients in CAGs at the end of the period (12 months) to the total number of patients enrolled in CAGs from the beginning of the program (*100)	>95%
12-month retention in care among patients in PFT	Number of patients active in PFT 12 months after enrolment to the total number of patients enrolled in PFT 12 months prior to the reporting period (*100)	>95%
Overall retention in care among patients in PFT	Number of active patients in PFT at the end of the period (12 months) to the total number of patients enrolled in PFT from the beginning of the program (*100)	
VL Suppression among CAG patients	Number of active patients in CAGs who are virally suppressed (VL<1000 copies/ml) to the total number of patients with viral load measure (*100)  Percentages of CAG patients without the VL measure.	>90%
VL Suppression among PFT patients	Number of active patients in PFT who are virally suppressed (VL<1000 copies/ml) to the total number of patients with viral load measure (*100)  Percentages of PFT patients without the VL measure.	>90%
Mortality among CAG patients	Number of patients who died while in CAGs during the period of  - 12 months - 24 months - 36 months, since enrolment  to the total number of patients since enrolment	< 5% in 12 months  < 10% in 24 months  < 15% in 36 months
Mortality among PFT patients	Number of patients who died while in PFT during the period of  - 12 months - 24 months - 36 months, since enrolment  to the total number of patients since enrolment	< 5% in 12 months  < 10% in 24 months  < 15% in 36 months

Monthly remote supervision from the task force team	Number of received completed monthly reports per project	$\geq 12$ (1/month)
Monthly CAG meetings	Number of meetings organized in the community and attended by the members of the CAG in the period of 12 months	$\geq 12$
CAGs meeting attendance	Sum of all percentages of attendance in each scheduled CAG meeting divided by number of meetings in the period of 12 months.  Percentage of attendance ((# patients present/#CAG) members (*100))	>80%
Stock outs during period (12 months)	Rupture of medication at the delivery point in the preceding 12 months  <i>Rupture – defined as the complete absence of required drug for the period longer than 1 week</i>	0 (zero)
Initial status of the cohort	a) Percentage of patients to be enrolled in PFT with initial VL $\leq$ 1000 copies/ml  b) Percentage of patients to be enrolled in CAGs with initial VL $\leq$ 1000 copies/ml	

**10.1. Data collection at the baseline:**

before implementation of the differentiated model of care (patient information is collected from the monitoring tools, patient files, and registry books). The following information should be captured in the CAGs database at the beginning of the program:

*ID, Sex, Date of Birth, Age (years), Entry method (IPD, OPD, PMTCT, Transfer, Tuberculosis, Other), Programme (General, PMTCT, Tuberculosis), On ART (Yes/No), ART – date of initiation, Cohort status, Date of status change, Cause of death, Comments about death, First VL, VL Date, Weight at start, TB, TB Code, Date of last consultation, Date of next consultation.*

## 10.2.CAG form

**Aim:** The CAG form serves as the primary document for the teams during CAGs formation, allocation to the groups and CAGs monitoring at the facility level.

**Responsible for completion:** Consultant/Nurse at the HIV clinic/ counselor after consulting with the CAGs leaders and patients.

**When to be completed:** during CAGs formation and activation. Updates during the duration of the program

**Nom de CAG:**

**CAG No:**

**Président:**

<b>Date d'activation</b>								
<b>Le groupe communautaire ARV du Centre de Santé de Boguila (BOG-CAGs)</b>								
<i>Donner l'information sur le CAGs</i>								
Axe								
Village								
Quartier								
Distance à partir de Boguila								
Nom du prochain patient qui retirera les médicaments lors du prochain rendez-vous								
Date du prochain retrait de médicament								
Date de rendez-vous pour consultation de tous les membres du groupe								
Fréquence de retrait de médicament						6 mois		
Fréquence de réunion du groupe avec tous ses membres						Une fois par mois		
La place de la réunion								
<b>Information des patients dans les CAGs</b>								
No.	Code	Nom et Prénom	Bon statut clinique?: (Oui/Non - spécifié)	Résultat de la première CV (date)	Résultat de la deuxième CV (date)	Régime	Date d'entrée dans le CAG	Date de sortie du CAG (raison)

## 10.3.ART distribution form









### 10.6.CAG and Patient Form

**Aim:** The CAG and Patient Form aims to monitor the changes in the PFT/CAG program (new patients who entered the program, moved within the program – CAG-CAG, CAG-PFT, PFT-CAG, moved between the programs (PMTCT, General, TB), changes to the patient’s cohort status or individual data) and to provide the update of the patient’s status at the medications pick up

**Responsible for completion:** Consultant/Nurse at the HIV clinic/Counselor/Pharmacist

**When to be completed:** Weekly

FOSA:

Date de rapport: \_\_\_\_/\_\_\_\_/\_\_\_\_

SEMAINE: \_\_\_\_

FICHE DE SUIVI ET MIS A JOUR DES PATIENTS CAG/PFT																					
N	Date	Code	Sexe (M/F)	Age (ans)	Méthode_Entrée (P1) (P2) (P3) Général, CDC, Tuberculose, Autre	Programme (général ou P1/P2/ TB)	TB (Oui/Non)	TB Code	TARL_Date _Debut	Start_ TAR (Oui/Non)	Status_Cohorte (actif, perdu, décédé, transféré, AC, DPO)	Date_change seuil_status	Cause de décès	Commentaire - information de décès	Modèle (CAG ou PFT)	Date d'entrée du modèle	CAG_Nom	Origine_Patient	CAG_Contingente non (Oui/Non)	Commentaires	

### 10.7. Absence during consultation/ART pick up form

**Aim:** The Absence during consultation/ART pick up form aim to communicate with the Community Health Workers about the patients that missed their consultation/ART pick up appointment.

**Responsible for completion:** Consultant/Nurse at the HIV clinic/Counselor/Pharmacist/Community Health Worker/Patient coming for medication pick up. **When to be completed:** Weekly

FORMULAIRE DE RECHERCHE DES PATIENTS												
TB-VIH/PHARMACY					RESULTAT DE RECHERCHE							
Code	Nom et Prénoms	Adresse (Origine géographique)	Nom de CAG ou PFT	Date d'absence au Rendez-vous	Retrouvé (Oui/Non)	Si, retrouver Rejoint Programme? (Oui/Non)	Date ou il a rejoint le Programme	Si, pas retourner Pourquoi ?	Statut de Patient (Actif, PDV, Décédé, Transféré)	Date du décès/Transfert	Cause du décès (A-B-C-D-E-F-G-H-I-J-K)	Commentaire

\*Actif ici, signifie que le Patient a été effectivement retrouvé

\*PDV signifie qu'on n'a pas des informations sur le patient apres 3 mois d'absence a la consultation/retrait des medicaments

Cause du décès: A-liée au SIDA B-Diarrhée C-Respiratoire D-Malnutrition E-Liee a la grossesse F-Paludisme G-Accident H-viol/conflit I-Iconnu J-TB K-Autre

### 10.8. HIV screening and testing registry book

DEPISTAGE											
N°	Date	Code	Sexe (M/F)	Age (Ans)	Origine Patient	Program (General, PTME)	TDR (interim, finale) pour enfant	TDR 1 (Determine) Résultat	TDR 2 (UniGold) Résultat	Date PCR	PCR Résultat

### 10.9. Monitoring of patients with high viral load registry book

N°	Code	Date	Nom et Prénom	Age (Ans)	Sexe (M/F)	CV_1 date	Résultat CV_1 (Mettez juste la valeur)	Poids (kg)	Observations (IOs, si TB - Code TB, Stade Clinique)	Date RDV	Date 2* RDV	Poids (kg)	Observations (IOs, si TB - Code TB, Stade Clinique)	Date RDV	Date 3* RDV	CV_2 date	Résultat CV_2 (Mettez juste la valeur)	Poids (kg)	Observations (IOs, si TB - Code TB, Stade Clinique)	Changement régime (Oui/Non)	Régime	Date d'entree du modèle	Model (CAG/PFT)	CAG_Nom (No)

#### **10.10. Appointment Registers for ART Refills and Annual consultation**

MoH registers should be used and completed.

#### **10.11. Patient health card**

National ART health card used in CAR beside the patient's information (ID number, name and surname, age sex, address, telephone number, initial ARV regimen, CTM – yes/no, allergy, TB – yes/no, date) contains enough space to include the information for nineteen patient's visits (Date VL visit, VL results , Date of VL appointment, Date of visit, Weight, Treatment - Current regimen and prophylaxis, Observations, Date of next appointment)

The information added: PFT or Name of the CAG and specification of the type of visit – ART refill or consultation.

## References

1. UNAIDS 2017 (<http://www.unaids.org/en/regionscountries/countries/centralafricanrepublic/>)
2. MSF Differentiated ART Delivery (CAG tool kit) (<https://samumsf.org/en/resources/hiv/differentiated-art-delivery>)
3. WHO 2016, consolidated Guidelines on the use of antiretroviral drugs for treating and preening HIV infection. (<http://www.who.int/hiv/pub/arv/arv-2016/en/>)