Stockholm Evaluation Unit

MEDECINS SANS FRONTIERES
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HIV DECENTRALISATION

Evaluation of the HIV Decentralisation Initiative, Kinshasa, DRC

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This publication was produced at the request of MSF OCB under the management of the Stockholm Evaluation Unit. It was prepared independently by ***Christelle Boulanger and Philippe Msellati.***

DISCLAIMER

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ACRONYMS

3TC	Lamivudine
ABC	Abacavir
AIDS	Acquired Immunodeficiency Syndrome
AMOCONGO	*L'Avenir Meilleur pour les Orphelins de Congo* (The Best Future for the Orphans of Congo)
ANSS	*Association Nationale de Soutien aux Séropositifs et aux Malades du Sida* (National Support Association for HIV+ and AIDS Patients)
ARCAD SIDA	*Association de Recherche de Communication et d'Accompagnement à Domicile de personnes Vivant avec le VIH* (Association for Communication Research and Home Support for People Living with HIV)
ART	Antiretroviral Therapy
ARV	Antiretroviral medication
AZT	Zidovudine (also known as ZDV)
BDOM	*Bureau Diocésain des Œuvres Médicales* (Diocese Bureau of Medical Projects)
CBO	Community-Based Organisation
CCM	Country Coordinating Mechanism
CD4	T–lymphocyte cell bearing CD4 receptor
CHK	*Centre Hospitalier de Kabinda* (Kabinda Hospital Centre)
COP	Country Operational Plan
CSO	Civil Society Organisation
d4T	Stavudine
ddI	Didanosine
DHS	Democratic and Health Survey
DRC	Democratic Republic of Congo
EFV	Efavirenz
EGPAF	Elizabeth Glaser Pediatric AIDS Foundation
FGD	Focus Group Discussions
GAVI	The Vaccine Alliance
GF	Global Fund to fight AIDS, tuberculosis and malaria
GIZ	*Deutsche Gesellschaft für Internationale Zusammenarbeit* (German Corporation for International Cooperation)
HIV	Human Immunodeficiency Virus
ICAP	International Center for AIDS Care and Treatment Programs
IHAP	Integrated HIV / AIDS Project
LPV/r	Lopinavir/ritonavir
LTFU	Lost To Follow-Up
M&E	Monitoring and Evaluation
MAP	World Bank Multi-County AIDS Program in Africa
MDR TB	Multi Drug-Resistant Tuberculosis
MoH	Ministry of Health
MPH	Ministry of Public Health

MSF	*Médecins Sans Frontières* (Doctors Without Borders)
NACP	National AIDS Control Programme
NFM	New Funding Model
NVP	Nevirapine
OCB	Operational Centre Brussels
OI	Opportunistic Infection
PEPFAR	U.S. President's Emergency Plan for Aids Relief
PHC	Primary Healthcare
PLHIV	People Living With HIV
PMTCT	Prevention of Mother-To-Child Transmission
PNMLS	*Programme National Multisectoriel de Lutte contre le SIDA* (National Multisectoral Programme to Combat AIDS)
PODI	*Point de Distribution d'ARV Communautaire* (Community ARV Distribution Points)
PVV	*Personnes Vivantes avec VIH* (People Living with HIV)
RDV	*Rendez-Vous* (Medical Appointment)
RNOAC	*Réseau National des Organisations à Assises Communautaires des PVV* (National Network of Community-based Organisations for PLHIV)
SA	Salvation Army
SAMU	MSF Southern Africa Medical Unit
SEU	Stockholm Evaluation Unit
SO	Specific Objective
STI	Sexually Transmitted Infection
TB	Tuberculosis
TDF	Tenofovir Disoproxil Fumarate
UCOP+	*Union Congolaise des Organisations des PVV* (Congolese Union of PLHIV Organisations)
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNDP	United Nations Development Programme
VL	Viral Load
WB	World Bank
WHO	World Health Organisation

EXECUTIVE SUMMARY

INTRODUCTION

Since 2002, MSF-OCB has managed an HIV and AIDS programme in Kinshasa at different levels of the health pyramid. The current project includes management of advanced HIV at the *Centre Hospitalier de Kabinda* (CHK, or Kabinda Hospital), a hospital managed entirely by MSF where more than 2,000 patients received HIV care in 2018. Since 2015, as part of its decentralisation initiative, MSF-OCB has also been supporting HIV and AIDS services at two Ministry of Health (MoH) hospitals, three health centres (HC), and a community-based ART distribution point (PODI) in the city.

This project initiative of decentralising HIV and AIDS services in primary healthcare (PHC) was introduced in 2005. The aim of decentralisation is to improve access to care and improve service quality of the various health facilities in Kinshasa (testing, paediatric and adult treatment, psychosocial support, monitoring, management of pharmacies and laboratories, and data management). The decentralisation approach has undergone many changes and adjustments since it was first established, particularly regarding the selection of the centres targeted and the type of support provided by MSF.

The specific objectives (SOs) of the evaluation were the following:

- **Identify the various phases of decentralisation strategies in Kinshasa and describe them**, what motivated them, how they developed, their objectives, the facilities targeted, and related activities, from 2005 to present.
- **Evaluate the development over time of HIV services (outputs and outcomes)** in MSF-supported health facilities (health centres and PODIs), from 2013 to present.
- **Identify the enabling factors and main challenges for each of the decentralisation strategy components** (training, supervision, mentoring, financial incentives, laboratory support, supplies of HIV and OI drugs, data management, logistical improvements), from 2013 to present.
- **Assess how past decentralisation experiences in Kinshasa have informed the current strategy** (which started in 2017).

The evaluators used mixed methods. Quantitative data were obtained through secondary analysis from the databases used by MSF and the MoH (DHIS2 and Tier.net). Qualitative methods included semi-structured interviews, focus group discussions (FGD), document review, and direct observation.

The data were extracted by MSF staff in Kinshasa from the DHIS2 and Tier.net databases enabled analysis of indicators by health site and by year (mortality and retention rate). Two types of data were analysed:

1. Overall figures by site and by year (from 2013 to 2018) for all the facilities supported by MSF (health facilities and PODI) on number of HIV patients monitored per year.
2. Dataset of cohorts of individual patients living with HIV for selected sites such as Hôpital Roi Baudouin, Hôpital Kitambo and 6 health centres (Bolingo, Bomoto, Boyambi, Elonga, Esengo, Libikisi) looking at gender, date of birth, date of positive HIV test, date of entry into site monitoring system, date started antiretrovirals, type of drugs initiated, date of switching to another antiretroviral regimen, date of end of follow-up, status at end of follow-up (follow-up, lost to

follow-up, transferred, died), CD4 count (at the start and end) and date of CD4 test, viral load with test date, amount of virus (copies / ml).

FINDINGS

The decentralisation component was developed in three phases. During the first (2005-2008), MSF began referring patients to three health centres, providing a comprehensive package of services, and supporting the partners centres with training for the staff and support to pharmacies and laboratory activities. Up to 2010, the opening of community ARV distribution points expanded the coverage of ARV distribution for stable patients. The final phase (2016-) involved a lighter model with a larger number of structures covered for a shorter period (18 months) in order to scale up the strategy and accelerate the integration of HIV services at primary level.

The findings of the evaluation show positive effects of the decentralisation strategy in several key areas:

- **MSF has demonstrated that a decentralised model of care for stable patients – involving task-shifting to nurses by focusing on building responsibility and capacity –** is efficient, and so it is now part of the national strategy on decentralisation of care. MSF has created a pool of trained and motivated staff at both MSF- and health facility-levels; the implementation of trainings in the initial years and of the mentoring strategy since 2016 were the key elements behind this success.
- **Data show a constant increase in the number of patients under treatment, with a good quality of care demonstrated by CD4 levels and VL tests** performed systematically since 2017. The number of PLHIV registered in the health facilities grew from 6,731 in 2013 to 10,188 in mid-2019. Since 2013, the cohort has continued growing, with a spectacular increase in health zones covered by PEPFAR, who has set ambitious targets to its implementing partners and opted for performance-based financing. When measured, VL did decrease, and of the small group of patients with data available between 350 and 380 days after starting treatment (N=32), 87.5% had a VL below 1000cp/ml.
- **The minimum package of care remains available and free-of-charge: ART, laboratory tests (particularly VL testing), and counselling.** Advice on testing, treatment, and treatment compliance is still provided at most sites. In PEPFAR-supported health zones, all health centres have been handed over to ICAP, IHAP and EGPAF, whereas there are no technical partners on an ongoing basis in the GF-supported zones. The number of PLHIV registered at the PODIs also continues to grow, and RNOAC is supported by PEPFAR.
- **Health facilities handed over to partners financed by PEPFAR show a satisfactory level of patients under treatment, a high level of retention, and a good quality of care.** While they are not able to maintain the whole package provided by MSF free-of-charge, they are closer to the standards set by MSF than the health facilities in GF zones are. In GF-supported areas, the minimum package of care has also been maintained, and as a general rule all the HIV focal points trained by MSF staff have remained in position, which has guaranteed a continuity in the quality of care.
- **There are now several decentralisation options,** including a fast-track option within health facilities, ARV patient clubs, and PODIs. Additionally, there is a strategy in place to prescribe and

provide medication for a longer period (six months of treatment, or two prescriptions for three months), limiting the number of visits that stable PLHIV need to make to health facilities.

- **The support provided to the national pharmacy in order to monitor health product stockouts and find solutions to avoid interruptions to treatments has been key** and yielded positive results over the years; 2016 was the year with the fewest stockouts. At present, observed stockouts are no longer due to the absence of health products from national storage, but due to the lack of transportation means and resources to send medicines from the Health Zone Bureau to health facilities and PODIs.
- **The close collaboration with MoH and the advocacy activities conducted by the MSF teams** proved both relevant and efficient. For example, the promotion of task-shifting to enable a 'nurse-based model' was a success materialized in the elaboration of the national decentralisation plan issued in 2016. The support to UCOP+ to collect ARV stockout data and raise the issue at MoH-level is another example MSF's effective advocacy leverage. Finally, the feasibility of the decentralised model as the only way to scale up the response to HIV needs has been demonstrated through the advocacy strategies, the collaboration with the MoH, and the dialogue with the main donors (GF and PEPFAR).
- **Finally, the collaboration with civil society organisations** such as RNOAC and UCOP+ was another positive decision by MSF, which strengthened the local resources able to carry out advocacy strategies at all levels (CCM, with the PNMLS and GF).

Nevertheless, the evaluation also highlighted the limitations to the decentralisation model:

- **The cohort analysis shows a major issue with retention in certain health centres, with retention rates at 12 months ranging between 77.8% and 88.9%.** Reports do not present major strategies to address this issue such as those adopted by IHAP, ICAP or EGPAF, which include investing resources in supporting a large number of community health workers who perform daily work in the community, who track LTFU patients (with the specific definition of 30 days with no-show since their visit date), and who are paid based on their performance (measured by the number of new patients included and number of LTFU patients brought back into the cohort).
- **The standards set by MSF in terms of laboratory equipment, trainings and service packages offered to the patients is not sustainable once MSF withdraws, as expected.** MSF's standards have created high expectations among health staff and patients, and thus place an additional pressure on partners who accept to have MSF facilities handed over to them. If MSF is to maintain these standards, a 'transition phase' should be discussed in order to sensitize both health workers and patients to the change in standards. The key issue remains the **treatment of opportunistic infections which is no longer treated free-of-charge** and so represent a major burden for patients.
- **Handovers present a variety of situations, and the process often lacks sufficient planning.** Even though discussions are sometimes initiated months before MSF withdraws, patients and staff at facility-level only seem to learn of the impending change very soon before the transfer from MSF to another structure happens. Thanks to the excellent commitment of the health facility staff – who have consistently strived to maintain a good level of care – and to the resources invested by PEPFAR and GF, patients are still receiving care.

- **Finally, the PODI model is still fragile.** RNOAC is facing difficulties to train and support the new PODI; additionally, other CSOs must be involved in PODI follow-up. Communication between PODIs and health facilities is sometimes difficult, and staff working in PODIs experience very precarious conditions that don't provide satisfactory living environments.

CONCLUSIONS

A detailed retrospective analysis of the decentralisation of HIV care in Kinshasa shows that, despite certain inconsistencies in the strategies implemented over the past 15 years, MSF has been guided by the intention to respond to a critical need for HIV care. While the first phase (2005-2008) was too disconnected from the health system and DRC authorities, it already bore the principles that made decentralisation a success, including: high-quality hospital level service for complications; integrated care at health centre level, supported by MSF staff for training in care and the provision of medicines; and the introduction of community counsellors to ensure follow-up and reduce LTFU rates. Subsequent phases refined the model, creating an additional, community-based level of decentralisation (creation of ART distribution points), structuring capacity transfer around the mentoring methodology, and developing a lighter, faster model to scale up the integration of care services in the city.

Quantitative data show a different evolution pattern at each site, but some elements are shared by most: the F/M gender ratio of roughly 70/30; the general increase in patients over time, and the very low number patients on second line ART. The median CD4 is roughly 249 cells/µl for new patients, and 393 cells/µl among patients treated for longer. A good level of VL measurements was performed from 2017, and a good proportion of patients had undetectable VL. Reported mortality was low (except in Kitambo) and the LTFU rate varied between sites, most often and likely including undeclared deaths. Retention in care is a cause for concern in certain health centres, with LTFU rates as high as 20% to 30%.

The decentralisation model has been adopted (through the guidelines on task-shifting produced by the MoH in 2016) and is promoted by both GF and PEPFAR. In that sense, the intervention can be described as successful in having created an enabling environment by means of a robust and proven model. GF is now funding the PODI Centre, and PEPFAR is supporting the PODI Ouest and Est with ICAP as implementing partner; all these centres were handed over by MSF. As far as the GF is concerned, the concept note already includes financial support to PODIs, and more PODIs will be funded for the next cycle. PEPFAR plans to open ten more PODIs on the same model both in Kinshasa and elsewhere, including Ituri, Haut Katanga and Aisiro. PODIs are regularly presented in regional discussion fora as one of the successful strategies to scale up access to treatment with no additional burdens placed on the health system. A November 2019 workshop organised by UNAIDS in Saly provided an occasion to revisit the differentiated approaches and the advantages of decentralisation. Other countries in the region (including Congo Brazzaville) are now planning to open PODIs following MSF's community-based model, and will receive GF resourcing to support them.

MSF should have focused its efforts on the GF-supported health zones that lack strong international organisations, similar to those that collaborate with PEPFAR (ICAP, IHAP, EGPAF) who are capable of providing regular health centre supervision. However, as shown on the map (Figure 5, p29) until 2017 MSF elected to support 19 facilities located in PEPFAR-supported health zones and only 13 in the GF-supported areas, as more PEPFAR facilities met the necessary criteria for project implementation. These criteria included having a large cohort of patients, a well-functioning laboratory, and the

presence of partner organisations capable of resuming support after MSF's eventual departure. Although there were more pressing needs for support in the GF-supported health zones, MSF often chose security and a favourable environment to ensure the success of its model, which coincided with facilities supported by PEPFAR. This decision had two major consequences: health centres located in GF-supported areas continued to receive very little support, which in turn affected the inclusion of new patients and the retention of patients already on treatment, as NACP figures confirm. Therefore, the decentralisation model can only be said to work in a favourable and enabling environment. While the model ostensibly demonstrates a good cost-benefit ratio, it is only being tested in a favourable environment wherein PEPFAR invests significant resources into staff training, patient follow-up, and support to CBOs. Therefore, this model has not been demonstrated as feasible with fewer resources available to support staff and activity supervision, and a when delivering a larger package of services.

MSF's added value in this area seems to lie in mentoring, training, and advocacy, which the evaluators believe are **the major strengths it brought to the approach**. These three added values could be scaled up to accelerate decentralisation (with the development of new concept notes feasible by March 2020), in particular by supporting the MoH to negotiate and standardise the approach with GF and PEPFAR, the main donors. Furthermore, this type of intervention has been widely implemented in English-speaking Africa (Eswatini, Malawi, Kenya and South Africa), but only small steps have been taken in the West and Central Africa region, which is still far from reaching the 90-90-90 targets. MSF can provide technical support to other countries and CSOs in order to support decentralisation in the region; the Central African Republic has begun adapting the model, and Guinea is introducing an interesting version of it.

RECOMMENDATIONS

As mentioned, this evaluation has not assessed the current decentralisation strategy operational from 2016 to present. Specific recommendations and suggestions should therefore be considered as valid and applicable insofar as they have not already been implemented and do respond to challenges which are still present.

⇒ **Recommendation 1:** Simplify, strengthen, and intensify training for mentors for the development of mentoring activities, – one of MSF's main strengths – with a specific refresher training approach for health staff trained since 2016. This methodology could also be shared with PEPFAR and its implementing partners (IHAP, ICAP, EGPAF) that also support the health staff at facility level.

⇒ **Recommendation 2:** In order to speed up access to testing and treatment services, develop a 'light decentralisation' model following these principles: shorter training and longer mentoring (with the possibility of collaborating with senior managers of health centres to supervise new arrivals); one-off support and a minimal package of services; and simpler withdrawal processes during MSF's departure. As some of these new modalities may be innovative, MSF may be interested in piloting them in some centres to see how they work (implementing them in parallel and measuring their effects on key indicators). Potential options to be considered for this light approach model are presented below:

1. A rotation system in the health centres and PODIs, so that the most senior staff can start activities in the most recent centres and PODIs and provide support for the activities.

2. Drawing differentiated packages:
   a. A zonal approach: like what is already in place with a 'mother' centre and 'satellite' centres offering a smaller package (screening tests).
   b. A 'tailor-made' approach by geographic area of intervention: map the areas where the majority of people living with HIV are concentrated, identify the weaknesses of the health facilities, and offer only part of the priority packages (capacity building; laboratory; community activities; improvement of the drug circuit; data reporting).
   c. A progression path for each component: draw up a standard roadmap for each component (which develops to a final stage of sustainability guided by a series of preconditions), and then assess, identify and provide specific support to structures on this scaled path. MSF may not favour this option as it is very demanding and less flexible.

⇒ **Recommendation 3:** If PEPFAR and GF confirm their intention to support PODIs, scale up PODIs (continue to support RNOAC staff and other PLHIV organisations) and transfer the most senior staff to the new PODIs in order to ensure that skills transfer from experienced staff members onto new ones, and to provide them with career progression opportunities. In addition, discuss the formalisation of PODIs, as they are currently perceived in very different ways (by Cordaid, PEPFAR, RNOAC) and their practices are diverse. This may not be a problem if the minimum conditions for success are defined. As a community-based approach, the aim is not standardisation, but rather to identify the conditions for success that should be established before starting new PODIs.

⇒ **Recommendation 4:** In order to monitor the quality of care and the stability of patients, conduct a study over the next three years on a small number of registered patients, at a health facility recently handed over from MSF to a partner facility, to assess patients' access to services and satisfaction levels and to understand their reasons for leaving. There is also a need to locate LTFU patients in order to try to measure the number of deaths occurring. Additionally, gather information on patients within the MSF cohorts who are not on treatment (and the reasons why, even if we can assume that there are very few in 2019-2020).

⇒ **Recommendation 5**: Assess the accessibility and quality of services for key populations in order to measure the need for a specific service provided through PODIs. MSF teams are currently considering a PODI specifically for key populations. It may be useful to contact existing key population organisations to discuss the possibility of training their staff to open a dedicated PODI. Studies on barriers to accessing testing and treatment for these population groups are already available, as is a mapping of CSOs working towards meeting the 90-90-90 targets. These are important documents for referral as a starting point for dialogue and to identify the most relevant strategies.

⇒ **Recommendation 6**: Design a thorough handover strategy for transferring health facilities to partners based on the following principles: minimum standards of quality of care (with preparation for a transition between MSF's high standards and those guaranteed by the partners), a good communication strategy, and sensitisation of both health centre staff and patients. Past handover experiences in other MSF HIV projects – such as the steering table implemented in the MSF-OCG project in Kenya (for the transfer of Homa Bay Hospital to the MoH), or the tripartite partnership trial (Ministry, organisation or donor, MSF on specific aspects) – are interesting avenues to be explored at the next Roundtable.

⇒ **Recommendation 7:** Support and strengthen the NACP through regular information meetings and regular coaching with the field coordinator, and strengthen MSF's presence within the CCM in order to address two main areas:

1. The elaboration of joint 'minimum' standards with the MoH and its partners to harmonise interventions and the delivery of care across Kinshasa, adding simple OIs and skin diseases to PEPFAR's programme.

2. The need for NACP support in strategic decisions and dialogue with financial partners, in particular PEPFAR, who are involved in the HIV response without oversight from accountability mechanism and who do not share their data, while setting their own testing and treatment enrolment targets and maintaining their own procurement system, etc.

INTRODUCTION

PROJECT BACKGROUND

Kinshasa, the capital of the Democratic Republic of Congo (DRC), is a huge city with more than 15 million inhabitants. It forms one of the country's 11 administrative provinces. Public transport is very limited and access to healthcare is challenging.[1] HIV prevalence is 1.6% among people aged 15 and above (DHS 2013).[2]

Kinshasa's 35 health zones offer HIV management and prevention of mother-to-child transmission (PMTCT), but only 430 out of 2,169 health facilities provide comprehensive HIV services (prevention, testing, care and support services). Around 59,000 people living with HIV were on antiretroviral treatment (ART) at the end of 2018.[3]

Since 2002, MSF-OCB has managed an HIV and AIDS programme in Kinshasa at different levels of the health pyramid. The current project includes management of advanced HIV at the *Centre Hospitalier de Kabinda* (CHK or Kabinda Hospital), a hospital managed entirely by MSF, where more than 2,000 patients received HIV care in 2018. Since 2015, as part of its decentralisation initiative, MSF-OCB has also been supporting HIV and AIDS services at two Ministry of Health (MoH) hospitals, three health centres, and a community-based ART distribution point (PODI) in the city.

This project initiative of decentralising HIV and AIDS services in primary healthcare (PHC) was introduced in 2005. The aim of decentralisation is to improve access to care and improve service quality of the various health facilities in Kinshasa (testing, paediatric and adult treatment, psychosocial support, monitoring, management of pharmacies and laboratories, and data management). The decentralisation approach has undergone many changes and adjustments since it was first established, particularly regarding the selection of the centres targeted and the type of support provided by MSF.

The initiative's implementation over the past 15 years has included 'Roundtable' discussions involving a range of different stakeholders (operational staff, field staff, SAMU staff). However, this is the first external evaluation of the Kinshasa decentralisation initiative's medical outcomes, challenges, and enabling factors. This evaluation was part of a broader process of assessing decentralisation strategies in Kinshasa, and as the initial exercise it focused mainly on MSF's past experience in Kinshasa and how it has informed the current strategy.

EVALUATION SCOPE

The evaluation covers the period from 2005 to 2018 and relates to MSF's efforts to decentralise HIV management in Kinshasa.

The specific objectives (SOs) of the evaluation were the following:

[1] According to the ToR of the evaluation of the decentralisation component drafted by MSF.

[2] Ministry of Planning, Ministry of Public Health, Measure DHS ICFI. Preliminary report DHS DRC 2013-2014.

[3] Op. cit.

1. **Identify the various phases of decentralisation strategies in Kinshasa and describe them**, what motivated them, how they developed, their objectives, the facilities targeted, and related activities, from 2005 to present.
2. **Evaluate the development over time of HIV services (outputs and outcomes)** in MSF-supported health facilities (health centres and PODIs), from 2013 to present.
3. **Identify the enabling factors and main challenges for each of the decentralisation strategy components** (training, supervision, mentoring, financial incentives, laboratory support, supplies of HIV and OI drugs, data management, logistical improvements), from 2013 to present.
4. **Assess how past decentralisation experiences in Kinshasa have informed the current strategy** (which started in 2016) and what challenges can be anticipated.

METHODOLOGY

The evaluators used mixed methods. Quantitative data was obtained through secondary analysis from the databases used by MSF and the MoH (DHIS2 and Tier.net). Qualitative methods included semi-structured interviews, focus group discussions (FGD), document review, and direct observation.

Quantitative Data

The data were extracted by MSF staff in Kinshasa from the databases used by MSF and the Ministry of Health (DHIS2 and Tier.net). The data collected made it possible to analyse indicators by health site and by year (mortality and retention rate).

For the purposes of this evaluation, we used two types of data:

1. Overall figures by site and by year (from 2013 to 2018) for all the facilities supported by MSF (health facilities and PODI) on umber of HIV patients monitored per year.

2. Dataset of cohorts of individual patients living with HIV for selected sites such as Centre Hospitalier Roi Baudouin, Hôpital Kitambo and six health centres (Bolingo, Bomoto, Boyambi, Elonga, Esengo, Libikisi) looking at gender, date of birth, date of positive HIV test, date of entry into site monitoring system, date started ART, type of drugs initiated, date of switching to another antiretroviral regimen, date of end of follow-up, status at end of follow-up (follow-up, LTFU, transferred, died), CD4 count (at the start and end) and date of CD4 test, VL with test date, amount of virus (copies / ml).

The first dataset makes it possible to follow the evolution of the number of PLHIV and to compare them between years and sites. The second dataset identifies the proportion of men and women being monitored, the number of people treated with ART (first and second-line), the average CD4 count among people treated at the start and during treatment, the number of VLs tested and the proportion of VLs under 1000 copies / ml, the number of PLHIV with 12, 24 and 60 months of follow-up, the number and proportion of people LTFU as well as the number and proportion of deaths. It also made it possible to establish survival curves by site and compare them on survival and retention indicators. Survival tables were created for deaths and loss to follow-up for each cohort dataset. Kaplan-Meier method was used to establish survival curves with log-rank tests to compare survival curves.

The t-test was used to calculate the means and the chi-squared test to analyse the qualitative data. The data were analysed using Stata™.

Qualitative Data

In addition to individual semi-structured interviews and focus group discussions, a desk review of available reports and studies and direct observation of 13 facilities were conducted. A complete list of key informants was created, and they were interviewed following an interview guide validated by the MSF team. Key informants for the collection of qualitative data include MSF staff, MoH staff, patients, international partners (donors and implementers), and local CSOs.

The MSF team in Kinshasa was responsible for recruiting participants from among patients and healthcare staff; participants were then asked specific questions as per the validated interview guide which were intended to elicit information regarding the participants' satisfaction levels, the quality of MSF's support, and details of the participants' daily lives. The local MSF team also participated in several focus groups which mainly concentrated on the strengths and weaknesses of the project, the main changes that the project has brought about at all levels, and the turning points that MSF staff identified during the 15 years of intervention.

Table 1: Summary of qualitative data collection, MSF KINDE HIV Project, October 2019.

FACILITIES VISITED: 2 HOSPITALS (RB AND KITAMBO); 11 HCS; 3 PODIS (CENTRE, OUEST, EAST)				
	Desk Analysis	Semi-conductive Interviews	Focus Groups	Total
Medical Routine Data	MSF Sitreps Tier-net DHiS2	1 (Provincial PNLS Director)		
Patients' Feedback			1 (6 persons)	
MoH Staff		Medical staff: 14 Counsellors: 13	1 (6) PODI	
MSF Staff Kinshasa		2	3 (15 persons)	
MSF HQ (Br and SAMU)		7		
International Partners		3		
Local NGOs		2		
TOTAL		**42**	**5 (27)**	**69 persons**

LIMITATIONS

Although staff members from MSF and the NACP openly and easily provided the necessary qualitative data, we were faced with several limitations regarding the completeness and quality of the quantitative data. Some data were either not available or not sufficiently reliable to analyse HIV service accessibility and quality. For example, the site cohort datasets recorded little information on PLHIV who were not on treatment; in fact, cohorts were only available for patients receiving treatment. This affected the evaluators' ability to determine the level of effectiveness and the results of the decentralisation strategy, particularly after MSF handed its support over to other partners.

An inventory of the medical database was conducted by MSF staff and the MoH team. The findings relating to the capacity of all the relevant facilities to collect and analyse reliable data also fed into the general findings of the evaluation (as indicated in SO 3).

We have highlighted the limitations of retrospective analysis to meet SO 1. However, we were able to meet many informants involved at the time, including patients, activists, and staff members. Meeting a large number of people enabled us to limit the impact of hindsight bias (current opinions blending with past recollection) on evaluation results.

The evaluators made a point of clearly explaining the objectives and intended use of the evaluation to all informants, so as not to create false expectations about the process. Informants appeared to be comfortable talking about their lives and the difficulties they encountered, either as patients or as staff.

FINDINGS

In the course of its 15-year HIV project in Kinshasa, MSF has become one of the capital's key HIV response players. The range of care services provided at hospitals and health facilities, as well as the services provided to patients with advanced HIV, has set high standards and led to an increase in the number of people tested and initiated on ART. However, MSF teams and infrastructure were faced with the challenge of managing a large cohort of patients (around 8,000 at CHK in 2005) with no real possibility of transferring this responsibility to the MoH. The 2004-2010 decentralisation process, involving the opening of PODIs (a community-based ARV distribution approach to decentralise patients towards non-medical care), was built up gradually as a response to this situation, based on experiences, evaluations of results, and reorientations.

SUB-OBJECTIVE 1:

IDENTIFY THE VARIOUS PHASES OF DECENTRALISATION STRATEGIES IN KINSHASA AND DESCRIBE THEM, WHAT MOTIVATED THEM, HOW THEY DEVELOPED, THEIR OBJECTIVES, THE TARGETED FACILITIES, AND RELATED ACTIVITIES, FROM 2005 TO PRESENT.

The first part of the report will elaborate the logic of the decentralisation process and the gradual implementation of the strategy. Through these strategic reorientations, the MSF teams aimed to achieve specific levels of access and quality of HIV services for PLHIV.

The history of the MSF Kinshasa project's decentralisation component can be divided in three main phases: 2005 to 2008; 2010 to 2016; and 2017 to present. There was a transition period from 2009 to 2010 between the first and the second phases.

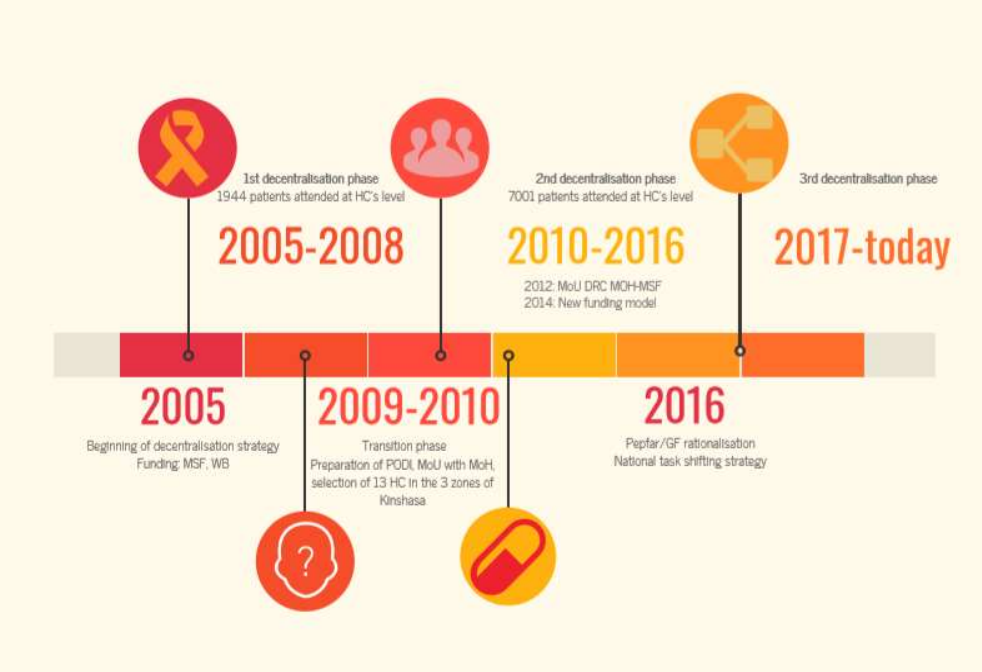


Figure 1: Timeline of the decentralisation initiative.

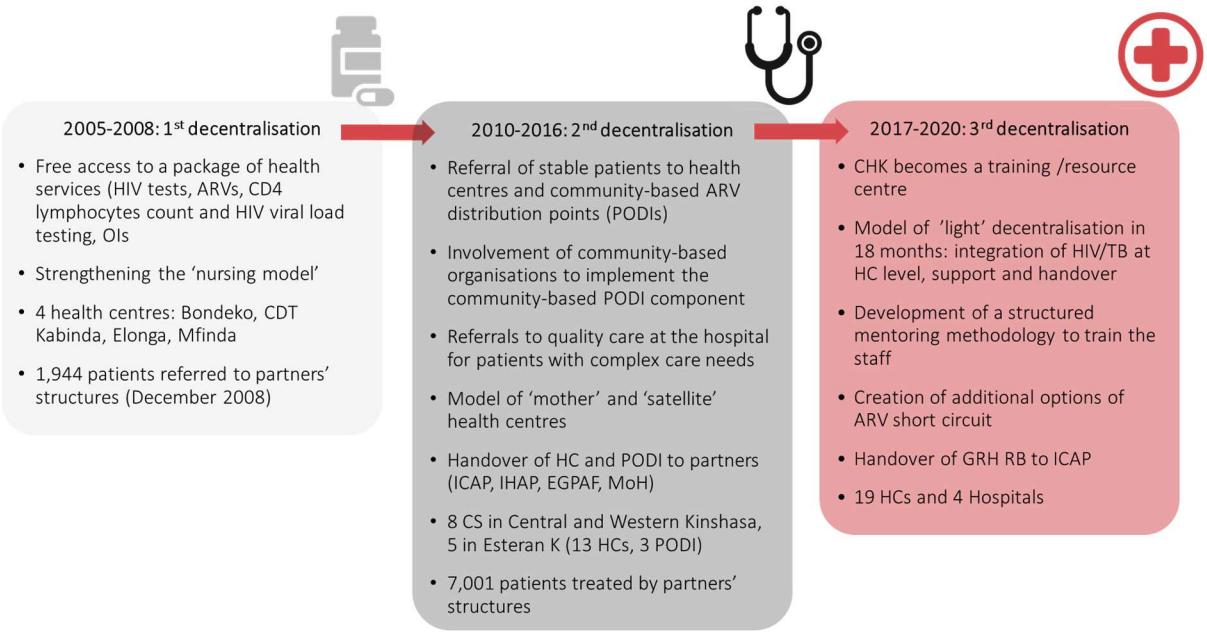


Figure 2: Summary of three phases of decentralisation initiatives, and its main characteristics.

First Decentralisation Phase: 2005-2008

The first decentralisation phase began in 2005 and covered a three-year period until 2008. The need to decentralise registered patients monitored at CHK was determined during discussions at the time and appeared the most important reason for MSF to pursue a decentralisation initiative. CHK was overwhelmed by its own success, with witnesses reporting that some patients would spend the day from 06h00 to 19h00 there.

Equally, the proposed decentralisation component also addressed the desire to respond to obvious HIV treatment needs. During this phase, the situation in Kinshasa was appalling, with an estimated HIV prevalence of 3.8% and around 228,000 people who had tested positive with HIV yet were not on treatment. ART for patients in African countries was still at an early stage; MSF initiated their first patients on ARVs in 2003, and progressed to providing treatment entirely free-of-charge in 2005. The Global Fund (GF), established in 2002 resulting from combined efforts from France and the United States, was the only donor that seemed likely to fund the HIV response in DRC. However, the GF's 'round'-based grant system was deeply unfair, as it provided countries with access to funds based on the quality of their funding applications, despite it being clear at the time that many countries (including DRC) were neither familiar with GF mechanisms nor with HIV treatment options.

Therefore, MSF's decision to decentralise services can be viewed as a response to a two-fold emergency, and thus having two separate objectives:

1. Decentralise patients treated at CHK in order to use the hospital's facilities to focus on those who were at an advanced stage of the disease (there was a high number of patients with advanced HIV at the time because systematic HIV testing had not yet been introduced by the NACP).

2. Initiate as many new patients as possible on ART, an initiative almost entirely financed by the Global Fund, the World Bank (through the MAP programme) and MSF, as HIV prevalence in Kinshasa and in the East of the country had reached 1.9% (EDS 2007).[4]

With these two objectives, MSF designed a decentralisation strategy focusing on the following activities:

1. Reinforce selected health centres at primary level to enable provision of HIV services, including testing, treatment, and management of STIs.
2. Provide counselling, nutritional support and transport incentives to the general population and/or to HIV patients referred from CHK.
3. Build capacity in all centres.
4. Provide drugs, particularly ARVs and medicine to treat OIs.

Following this strategy, the MSF team identified criteria for selecting partner health centres, the most significant of which were:

1. Geographic proximity of the centre to the majority of patients.
2. Availability of TB management facilities at the centre.
3. Presence of volunteer groups conducting home visits in the centre's proximity.

Four health structures were identified as suitable partner centres, which were managed by three different actors: **Bondeko**, managed by the *Bureau Diocésain des Œuvres Médicales* (BDOM); **Elonga**, managed by The Salvation Army (SA); and **Kabinda** and **Mfinda**, both managed by the MoH.

A system of counter-referrals of stable patients on ARVs from CHK to the Kinshasa health centres was thus implemented. Theoretical and practical training was followed by ongoing mentoring supervision provided by an MSF doctor, with the objective that doctors supervising the health centres would eventually be trained and supported in their HIV supervision activities.

[4] EDS 2007: EDS, O. Ministry of Planning, Ministry of Health, Kinshasa, Macro International Inc. Calverton, Maryland, USA. Demographic and Health Survey, Democratic Republic of Congo 2007. August 2008. 500p. This type of survey with a robust methodology is considered to be representative of the HIV context in a given country. Much higher figures were cited in MSF internal documents at the time but are not documented.

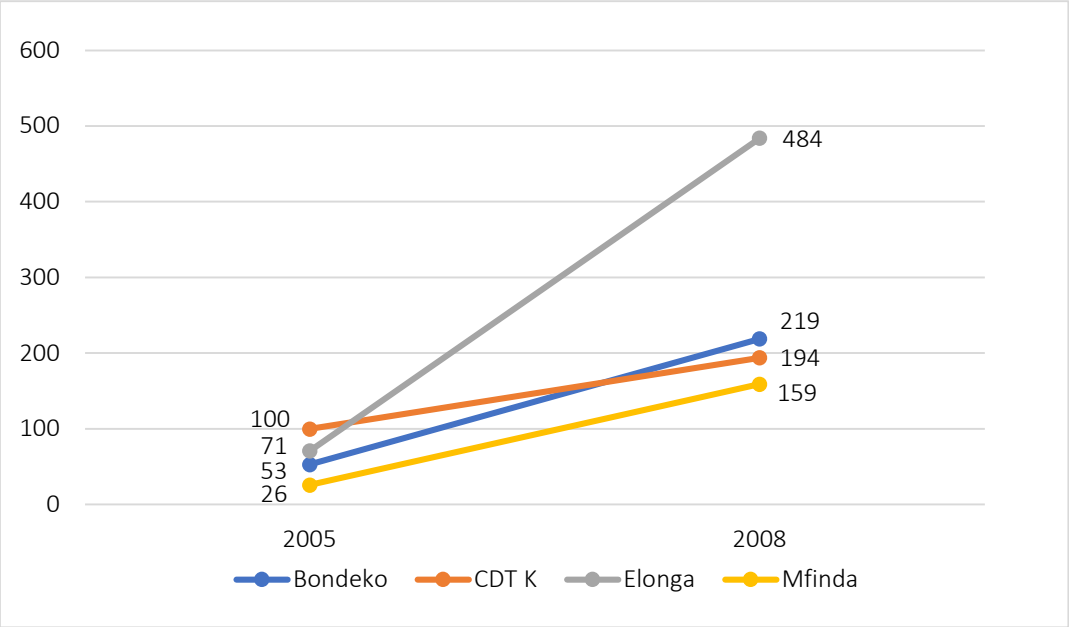


Figure 3: Decentralisation of patients between 2005 and 2008, by health centre. Source: statistics from MSF's annual reports.

MSF implemented a capacity-building strategy with the four partner organisations: BDOM, MoH, RNOAC (which began receiving MSF support in 2008) and SA. Each of them had strengths and weaknesses, which were identified by the MSF team and are summarised in Annex II.

MSF encountered constraints imposed both by the project's external environment and by some internal challenges; these can be identified in the field teams' annual reports and in analysis elements raised during the Roundtables organised in Kinshasa. They include:

1. **The competition between the NACP and the Multisectoral HIV/AIDS Programme, along with the lack of overall HIV strategy, caused ongoing confusion**. The absence of a National Strategic Plan for HIV and AIDS also created an obstacle for DRC: without an accurate situation analysis, it was impossible to know the extent of the HIV epidemic, the extent of the needs, who the stakeholders were, and what interventions were already in place. These conditions have hindered programmes from mounting an effective response; in particular, despite being the body responsible for the medical care for HIV-positive patients, NACP leadership has proven to be insufficient, technically weak, and occasionally too conservative.
2. **The lack of continuous support from the Global Fund** and the programme implementation conditions faced by sub-recipients caused frequent stock-outs in 2005 and 2006, and implementation paused for long periods of time because sub-recipients had to implement activities before receiving the necessary funding. Lacking cash flow and with no guarantee of continuous funding (which was interrupted for part of 2006), care services faced significant disruption and came to a complete stop in 2007.
3. **As a result of the above, the gap between the need for and the supply of HIV and AIDS services further widened during this period**, resulting in DRC's HIV and AIDS treatment coverage rate in 2008 being less than 8%, while most neighbouring countries had achieved the 30% mark. MSF chose not to order medicines via UNDP (principal recipient) or GF to guarantee a constant supply to patients supported by the NGO.

4. **Task-shifting and transferring patients from CHK to health centres was a very long process that has proven ineffective**. From 2007 onwards, patients returned to CHK or disappeared from patient registers at health centres, according to available statistics. In addition, HIV services provided at BDOM facilities were not free-of-charge, which undermined MSF's free care policy.

In 2008, having observed the aforementioned elements undermining the project's impact, MSF's decentralisation work was put on hold, although more than 1,000 patients had already been transferred to the four partner health centres.

During the same period, the MoH was increasingly advocating for HIV-positive patients to be integrated into health facilities at primary healthcare level. MSF had learned important lessons from their three-year decentralisation experience and decided to change their strategy. Two main lessons were considered:

1. The number of partners needed reducing. The experience of working with four partners had proven challenging, with delays caused by long negotiations before initiating patient transferral, and the different rules of each partner organisation making regular communication difficult. Based on past results, MSF chose to continue working with the SA.
2. The management of patients' transferral from CHK to the health centres took much longer and was far more time-consuming than expected. The teams understood that scaling up access to treatment through by transferring patients to primary healthcare facilities would clearly require an increase of the number of facilities offering treatment, but also a decrease of the service packages available (although it would still include more services than the ones offered in health facilities).

Between October 2008 and July 2009, MSF stopped working in the three health centres in Bondeko, Mfinda and Elonga, which were then handed over to BDOM and GIZ, and also suspended new patient additions to CHK's patient register. The team also began an internal evaluation, the results of which fed into strategic discussions aiming at re-articulating MSF's added value in the HIV response in DRC. Given the difficult context at the time (including political weakness of the MoH with regard to donors, catastrophic GF grant management by principal recipient UNDP, and a very small number of stakeholders providing services to PLHIV), it was crucial for MSF to focus on testing patients and ensure their access to treatment. In early 2009, the project coordinator highlighted that "while going through this worrying situation, we looked at our own project and realised that it somewhat reflected the external situation. The project was based on diluted and outdated objectives, and did not offer any real alternative to partners (…) We concluded that our main objective revolved around 'scaling up'".

Transition Period: Integration (2009); Assessment and Agreement (2010)

In the few months following MSF's cessation of activities in the three health centres, the team designed an alternative model to decentralisation: the 'integration'5 model, which aimed to provide HIV and TB integrated health services for PLHIV at primary healthcare facilities. Integration aimed to address co-

[5] During the course of this evaluation, the evaluators could neither identify nor precisely define to what the term 'integration' used for this decentralisation period really refers to. Neither could they determine the difference between this 'integration' period and the previous one. It is presented as a separate period in this report to ensure an honest documentation of this history.

infection issues and to provide patients with integrated HIV/TB services in a more efficient and well-thought-out 'one-stop shop' model.

This model required training healthcare staff, since they now had to treat two diseases and demonstrate the feasibility of treating both HIV/AIDS and TB at primary care level. This strategy was a compromise between either 'total substitution', involving MSF directly providing care as it had done at the healthcare facilities during the first decentralisation phase (and entailing assumptions and expectations of a higher quality of care); or 'total handover', which would prevent MSF from monitoring or following-up patients after they had left. Finally, this integration model confirmed the need for task-shifting to enable nurses to play a leading role in medical tasks, particularly prescribing ART.

The model was designed to develop over three years to demonstrate its cost-effectiveness; the long-term objective was to design a model and cost it in order to mobilise resources from potential donors, in particular the GF. The key words for this strategy were: integration, decentralisation, partnership, quality of care, and simplification. The purpose of this new decentralisation strategy was to improve the provision of care and to increase numbers of PLHIV in patient registers.

Unlike the first decentralisation phase, the concept of partnership was pivotal: while the first phase had seen tensions and misunderstandings between MSF and the MoH resulting from the first patient transfers to the Bondeko, Mfinda and Elonga health centres being conducted without any real dialogue with the MoH, the MSF-MoH relationships were more fluid during this period.

In addition, MSF planned a more straightforward approach: a single partner (the SA); a single zone (the east of the city, which is the poorest and most vulnerable quarter); and a target to initiate 500 new patients on ARVs per centre each year.

This approach was theoretically more feasible than the first, but its subsequent failure was precipitated by an intrinsic weakness: it relied on the compliance of a single partner and its agreement with MSF's suggestions, which ultimately did not happen. Consequently, the approach failed before it had even started.

In late 2009, the MSF teams were once again faced with the same operational questions on how to address HIV in Kinshasa, and had to take a decision. They were caught between the need to provide services to PLHIV – who could not be added to MSF's now closed patient registers – and the need to demonstrate that a simplified system can be used to treat PLHIV in a resource-poor country.

2010 was a pivotal year. The team decided to take the time to both consolidate achievements to-date and undertake a series of assessments in order to better understand the situation. The project coordinator commented:

> "Over the years, we have tried many strategies, faced with the challenges of providing care and support to PLHIV in Kinshasa. We have worked with private partners on decentralising HIV services, tried HIV integration with a single private partner, but none of this provided compelling results. We must therefore learn from past experiences, and find another strategy. This is why, in 2010, we plan to conduct a study with the various government health facilities, with a view to establishing a closer partnership with the NACP."

The team subsequently carried out an assessment of the health context in Kinshasa as per the table 2 below:

Table 2: Situation assessment of the HIV response in the province of Kinshasa MSF HIV Project, Kinshasa, DRC. Source: MSF 2011 annual report.

Study on access to HIV care services in the Kinshasa zone
Survey on HIV prevalence in the East and West zones of Kinshasa
Study to identify target population
Patients on ARVs in the city of Kinshasa
Assessment on care services in health centres
Assessment of health centres infrastructure
Evaluation of quality of care
Talks with the provincial medical inspectorate

In addition, MSF established an agreement between the NACP and MoH to finally lay the foundations for a collaborative partnership, which has in fact lasted for many years since. This collaboration strategy includes (but is not limited to) the opportunity **to evaluate** government health centres on: their capacity to provide care to HIV patients; ARV management and procurement; health centre staff qualifications; and their capacity to provide primary healthcare.

Armed with their experience and a collaboration agreement, MSF embarked on the next phase, known as the 'Second Decentralisation Phase'.

Second Decentralisation Phase: 2011-2016

The second phase added a decentralisation level to the original model: the creation of the PODI in the community for stable patients willing to undergo treatment at community level. Apart from testing and treatment, the PODI also offered a package of services such as therapeutic education, self-support group meetings, and VL follow up.

The updated decentralisation model is built around task-shifting, thereby allowing low-cost simplified care, accessible to the greatest possible number, and adapted to the needs of PLHIV:

- **CHK**: Referral hospital for cases with complex care needs and people with advanced HIV; transfer of stable patients to PODI / partner health centres; active participation in transfers; hospital-based care capacity and transfer of main opportunistic infections to two partner hospitals; TB/HIV co-infection treatment (including the introduction of GeneXpert™ from 2012) and management of MDR TB; revitalising the Treatment Failure / Difficult Case Committee by including partner centres.

- **Health centres**: HIV testing; treatment initiation; identifying and re-engaging LTFU patients by teams of peer educators; treatment support and treatment education; monitoring of VL and opportunistic infections.
- **PODIs** (community ARV distribution points): Distribution of treatments for three months; VL testing; testing and referrals for treatment initiation; advice and support groups.

During this phase, 13 health centres were supported and three PODIs were created, covering the three main areas of Kinshasa: West, Centre and East. The centres were chosen according to the proximity of the CHK patients' home and the proximity of the PODI. After the rationalisation (involving splitting geographical coverage between PEPFAR and GF), MSF slightly rearranged its presence in GF areas but continued supporting health facilities also supported by PEPFAR. MSF used quality of care as a determinant of their choice. Thus, there were nine health centres and two PODIs supported by PEPFAR, and four sites and one PODI in the GF area.

One of the key elements of this strategy, as compared with those previous, is the use of PODIs. Their initiation was driven by several objectives:

- Empower patients, especially for CD4 monitoring;
- Ensure local access to ARVs, and CD4 monitoring;
- Develop community action to provide care for PLHIV;
- Integrate community systems in designing strategies to locate LTFU patients and monitor treatment adherence among patients;
- Mobilise and strengthening support groups and community-based organisations (CBOs).

During 2009 and 2010, discussions around community-based approaches made progress, and two CBOs were identified as potential partners to implement the demedicalised patient care model: RNOAC and Fondation Femmes Plus. In 2011, MSF eventually decided to work with RNOAC, as it presented several advantages: it was a stable organisation known to MSF for a long time, with large numbers of patients who were part of the CHK cohort, and with CBOs spanning across Kinshasa city-province.

When it was decided to use PODIs, no official MoH guidance for conducting such programmes was available to CBOs. Task-shifting did not necessarily mean task 'demedicalisation', particularly when it came to ARV distribution. The project was therefore seen as a pilot both in DRC and in the region, although experimental interventions involving CSOs in care provision had been piloted in other African countries – notably ARCAD SIDA in Mali and ANSS in Burundi. However, those interventions still involved patients being cared for by healthcare providers (generally doctors) working with NGOs – rather than by non-medically trained PLHIV – prescribing and monitoring people on ARVs. In this respect, PODIs were the first initiative of non-healthcare PLHIV with this level of responsibility in Africa. In 2005, a paper co-written by Sidaction, UNAIDS and WHO provided an overview of best practices for expanding access to treatment through CBOs:

> "The survey confirmed the existence of an extensive community response to HIV care and treatment which appears to respond and change according to community needs. Flexible community action comes from medical providers, support groups, networks and consortia of people living with HIV, and faith-based organisations.

> Most of these community-based organisations are run by and for people living with HIV. Because they are driven by the needs of their clients, they have become increasingly involved in treatment access. Many report they are shifting, or want to shift, their activities towards treatment."[6]

This survey demonstrates the impact of these activities on access to treatment, and confirms the central role that CBOs must play in HIV response:

> "The research confirmed that community-based care and treatment responses should be: recognised as an important component of greater access to treatment; brought to the attention of policy-makers, programme-managers and donors; and supported in ways that will lead to greater impact, quality and appropriate partnership with public health efforts."

From this perspective, MSF's decision to support RNOAC in setting up PODIs coincides with the first community experiences in other countries, and the services provided by PODIs are similar to those provided in countries that have tried this approach: HIV testing, counselling, ARV distribution, VL tests, and support groups.

MSF support to partner health centres focused on the following activities and responsibilities:

1. Technical support provision for ART and patient monitoring in selected health centres.
2. Staff training and technical supervision, weekly supervision sessions (in hospitals, active involvement of an MSF doctor during hospital ward visits), and technical support provision in health centres. Emphasis is placed on the basic comprehensive package of HIV and AIDS care services and specific ad hoc training, thanks to the support of Southern Africa Medical Unit (SAMU).
3. Technical support to referral hospitals for the management of cases with complex care needs.
4. Psychosocial support provided through PODIs, with establishment or increase of CBO presence in health centres.
5. Support to improve the referral system from health centres to second-level referral hospitals:
   - Detection and care for patients with treatment failure;
   - Second-line treatment;
   - Detection and care of patients with severe side effects and/or opportunistic infections (including Kaposi's sarcoma);
   - Setting up tailored paediatric care;
   - PLHIV hospitalisation organised through partner hospitals for the majority of patients.

Implementation of this decentralisation approach went hand-in-hand with strong advocacy for task-shifting to nurses and community stakeholders, which was not yet part of the NACP national strategy.

Advocacy for free-of-charge healthcare was also conducted, since a policy for a free minimum package of services for PLHIV (according to law n° 08/011 of 14 July, 2008 protecting the rights of people living

[6] Sidaction, UNAIDS, WHO. Expanding access to HIV treatment through community-based organisations, Geneva, 2005.

with, and affected by, HIV and AIDS) has been voted in by DRC's legislature. The MoH also advocated for a policy guaranteeing free ART services, free HIV prevention services, and free HIV-related care and support interventions. Despite this, MSF estimated that nearly 50%[7] of the costs associated with HIV care (particularly access to services such as laboratory tests, nursing care, medical consultations, etc.) were paid for by patients, constituting "catastrophic spending on health".

After four years of decentralisation, MSF's support to the health facilities was organised as shown in the graphic below:

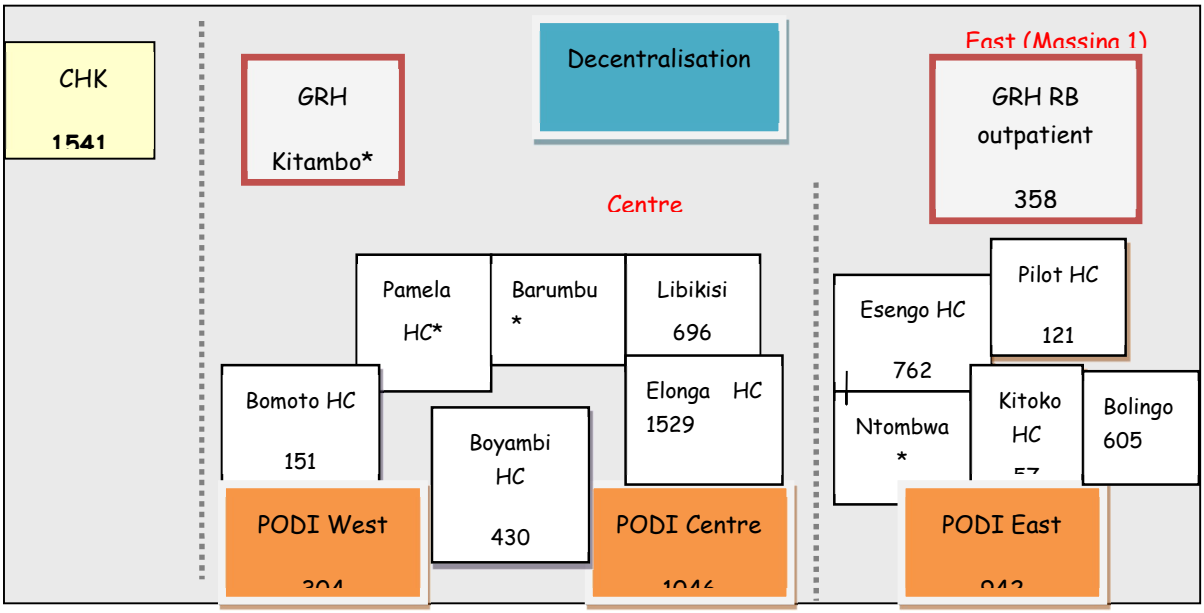


Figure 4: Mapping of HIV management and care in the HIV Project and its partners, Kinshasa DRC (2016). The dataset provided no 2016 data for those sites marked with *.

In 2015, the MSF team decided to gradually withdraw from the supported facilities, especially in the Western and Central area of Kinshasa in order to widen the scope of the decentralisation. However, it maintained a package of services in the Masina health zone that covered both medical activities at health centres, and community actions such as testing and treatment through the PODI and outreach activities conducted by community health agents based at health centres levels, with an MSF incentive. In most centres, the handover was well managed and international partners took over the responsibility of supporting the health facilities.

Third Decentralisation Phase: 2017 to present: Streamlining and New Funding Model

In 2014, the New Funding Model (NFM) brought about a real revolution in how recipient countries accessed GF financing. To the considerable relief of many, the grant allocation calculation methodology was now based on epidemiological data, a funding envelope was systematically earmarked for all countries regardless of the quality of their funding request, and above all, GF grants aimed to fill in the 'gaps' left by other donors, with a view to creating synergy and supporting the priorities identified by the MoH through their national strategy.

[7] Priorities of the advocacy strategy set during the Roundtable organised in Kinshasa in 2009.

This ended the chronic lack of funding, and it was finally possible to plan activities over a renewable three-year cycle. Furthermore, in 2016 PEPFAR and the GF carried out a streamlining exercise and divided the country into areas of intervention within which to define their responsibilities. Kinshasa was split in two, but it was clear to MSF teams from the start that none of the organisations in the areas covered by the GF were capable of supporting the scale-up of patient registers; all MSF reports highlight this as a main reason why MSF seeks to implement activities in the GF's intervention area. MSF's assessment conducted during the preparatory phase demonstrated that NACP – a sub-recipient of Cordaid, the GF's principal recipient – lacked capacity to support health centres in training, refresher training, and community-based activities aimed at testing new patients and identifying LTFU patients.

Following Roundtables in 2014 and 2017, it became clear that a scale-up strategy was necessary in order to reach the UNAIDS 90-90-90 targets to eradicate HIV. This acceleration of test and treat activities was only possible if the following measures were implemented:

1. The acceleration of testing through differentiated strategies such as index testing, community-based testing, self-testing.
2. The creation of additional circuits in order to offer more than one alternative for stable patients to access ART without any medical consultation (creation of TARV groups, self-support groups, short circuits in health centres).
3. A 'light' decentralisation approach (18 months) in order to support the health facilities in the integration of HIV and TB activities. This approach included the training of staff at CHK that became a resource and training centre for MSF and partners' staff, mentoring at health centre level, support to pharmacy, laboratory and VL, supervision of M&E capacity.
4. A 'health zone approach' with a selection of principal health centres called 'centres mères' and secondary heath centres called 'centres satellites'. This strategy aims to accelerate the testing in all health centres and refer positive patients to the principal health centres fully supported by MSF.

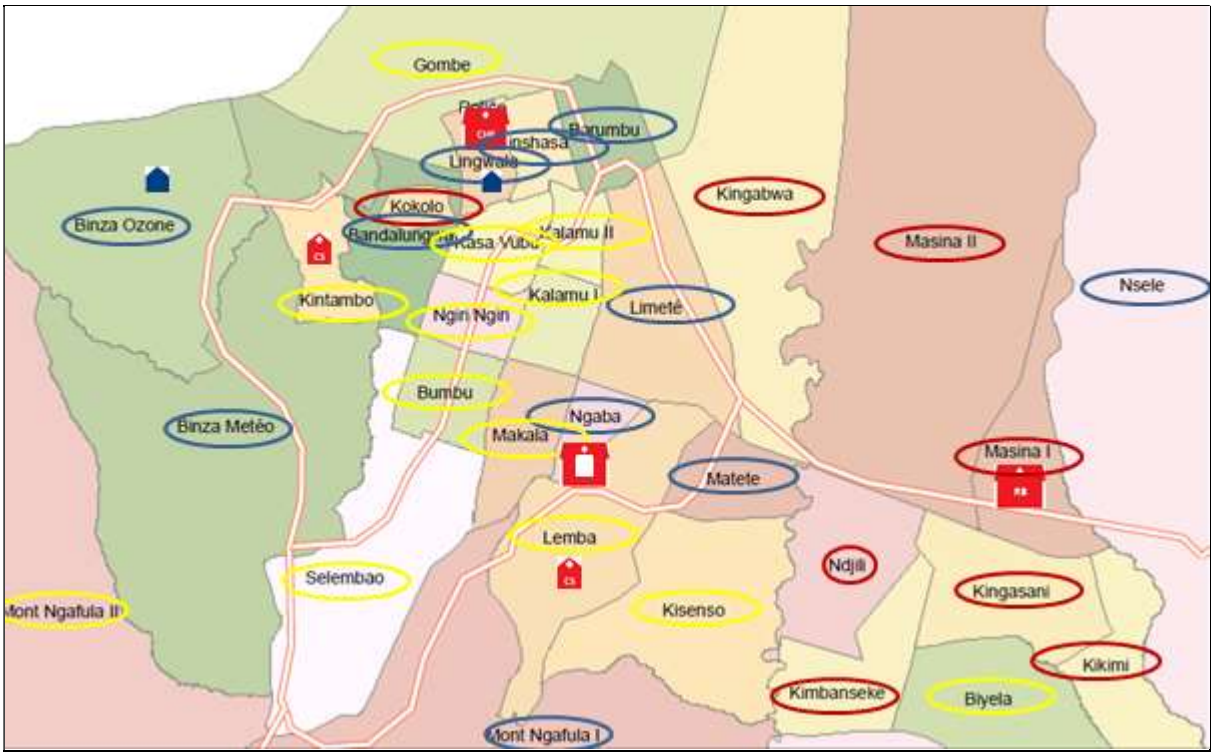


Figure 5: Geographical distribution of MSF support to health facilities in the more recent phase of the decentralisation (MSF 2017).

Key:

Supported hospitals (RB in Masina 1 – already replaced by CME Luyindu in Binza Ozone –, CHK in Lingwala and CME Ngaba: new hospital)

Partner health centres (Kimia in Kintambo, Lisanga in Lemba, and Libondi in Bumbu)

MSF PODI (Lingwala)

Global Fund zones

PEPFAR maintenance zones (remaining support in ARVs but no supervision)

Priority PEPFAR zones (includes the whole package of support)

SUB-OBJECTIVE 2:

EVALUATE THE DEVELOPMENT OVER TIME OF HIV SERVICES (OUTPUTS AND OUTCOMES) IN MSF-SUPPORTED HEALTH FACILITIES (HEALTH CENTRES AND PODIS), FROM 2013 TO PRESENT.

This chapter analyses the evolution in access and quality of HIV care in the facilities supported by MSF. It includes an analysis of the available services and the main clinical indicators. It covers the period during MSF presence and after its withdrawal until today.

During MSF's Support

All MSF-supported health facilities provided a full package of care and support services, free of charge: ART, laboratory tests, drugs to treat OIs, hospitalisation, nutritional support, and psychosocial support.

Training and support of MoH staff comprised training sessions on HIV provided by SAMU, a daily presence of MSF staff in health facilities, logistical support (renovation, commodities, and small equipment), and laboratory equipment and training.

The MSF psychosocial education (PSE) team trained counsellors from health facilities on counselling, ARV treatment initiation, patient follow-up to ensure treatment adherence, identification of LTFU patients in the community; and also created linkages with the community and supported the referral of patients who refused to leave the CHK register.

When PODIs were launched, counselling training was provided to the newly recruited staff, and various assessments were conducted to strengthen the system and improve operations. MSF also supported RNOAC as a technical partner and provided ARVs before they were introduced in the GF-supported areas, secured training in pharmacy management, provided disclosure support tools, and provided support for rehabilitation. All of this was then consolidated in the PODI toolbox, which is now available for facilities wishing to pursue or develop this approach.

From 2013 to 2015, eleven health centres and three PODIs were involved in MSF's HIV decentralisation project. Two hospitals were also involved: Kitambo from 2013 to 2016, and Centre Hospitalier Roi Baudouin from 2013 to 2018. A total of 5273, 7143 and 7429 patients were followed in 2013, 2014 and 2015 respectively as part of this decentralisation component (as illustrated in Table 3).

Detailed quantitative information was analysed in eight of the 18 (44%) MSF-supported health facilities and generalisation should be cautious. From 2013 to 2015, the number of patients followed increased gradually, as did the proportion of patients under treatment in centres where information is available. The proportion of those under second-line therapy remained very low. The proportion by gender remained stable at 70/30 F/M ratio. VL was not measured. Initial (pre-ART) median CD4 was comprised between 159 and 388 in the various health centres. It remained over 300 among treated patients. The LTFU and reported mortality rates were acceptable among patients monitored at the Elonga health centre. Mortality also appears to have been relatively low in other health centres with available information, but this may be a consequence of the relatively high LTFU rate (over 17% at 24 months in Bomoto and Boyambi, for example); however, Centre Hospitalier Roi Baudouin outpatients department presents a notably high mortality rate during MSF's first year of operation.

While important in Kinshasa's health system, Kitambo Hospital was of little significance to the MSF HIV project's decentralisation process. During the three years of MSF's support, the number of hospitalized PLHIV decreased and the mortality rate remained over 20% without any apparent improvement.

From MSF's Withdrawal to Present

The evaluation was able to verify that all the HIV focal points trained by MSF over the past 15 years are still in place: all of the 13 nurses and doctors trained during MSF's support are still working in the facilities visited, although they no longer receive any incentive in GF areas. Stability of this kind is unusual among healthcare staff and may be explained by the fact that Kinshasa is an urban area and thus more attractive to workers than rural areas, enabling better healthcare staff retention and, more generally, good quality HIV care.

The number of patients registered at decentralised level continues to grow (see Table 3), particularly in the PEPFAR-supported zones, likely due to the monthly objectives it sets (between 14 and 25 new patients per month) and its payment of performance-based bonuses which motivate teams to reach these monthly objectives. A very proactive testing strategy based on index testing has been implemented through community-based counsellors who report to the relevant health centres.

In addition, the minimum package of care remains available and free-of-charge: ART, laboratory tests (particularly VL testing), and counselling. Advice on testing, treatment, and treatment compliance is still provided at most sites. In PEPFAR-supported health zones, all health centres have been handed over to ICAP, IHAP and EGPAF, whereas there are no technical partners on an ongoing basis in the GF-supported zones. The number of PLHIV registered at the PODIs also continues to grow, and RNOAC is supported by PEPFAR.

It is noteworthy that there are now several decentralisation options, including a fast-track option within health facilities, ARV patient clubs, and PODIs. Additionally, there is a strategy in place to prescribe and provide medication for a longer period (six months of treatment, or two prescriptions for three months), limiting the number of visits that stable PLHIV need to make to health facilities. This strategy has not been implemented yet due to the specific logistic requirement of guaranteeing sufficient stock at the general store, but it is a priority of PEPFAR in 2020.

The table below shows the numbers of PLHIV monitored by year and by site. Boxes highlighted in grey indicate the years when MSF was present and supporting the facilities. It is apparent that, except for Kitambo General Hospital where figures fluctuate, the number of registered patients has increased at all facilities since MSF's departure, from 8615 in late 2015 to 10188 in mid-2019.

Table 3: Numbers of PLHIV monitored by year and by site, from 2013 until 2019. Boxes highlighted in grey indicate the years when MSF was present and supporting the facilities. *In 2019 data were available only for the first semester.

HEALTH FACILITY	2013	2014	2015	2016	2017	2018	2019*	DONORS
BOLINGO	385	391	590	605	630	684	699	PEPFAR
BOMOTO	348	465	399	-	-	605	250	GF
BONDEKO	-	-	-	-	-	230	323	GF
BOYAMBI	516	708	588	-	-	594	785	GF
CME BARUMBU	194	212	409	-	-	738	823	PEPFAR
ELONGA	1625	1505	1452	1529	1554	1681	1746	PEPFAR
ESENGO	395	519	530	-	-	552	803	PEPFAR
KITAMBO GH	198	393	381	-	489	206	471	GF
KITOKO	-	30	91	-	-	259	422	PEPFAR
LIBIKISI	130	315	288	-	-	505	669	PEPFAR
PAMELA	147	171	179	-	-	286	302	GF
NTOMBA MARIA	-	21	78	-	-	126	150	PEPFAR
PILOTE	142	312	341	-	-	447	616	PEPFAR
ROI BAUDOUIN GH OPD	-	240	358	-	-	372	565	PEPFAR
ROI BAUDOUIN GH IPD	377	456	639	449	460	444	-	
PODI East	864	1006	942	-	-	950	975	PEPFAR
PODI Centre	1029	1184	1046	-	-	-	-	GF
PODI West	381	377	304	-	-	-	589	PEPFAR
Total	6731	8305	8615	2853	3133	8679	10188	

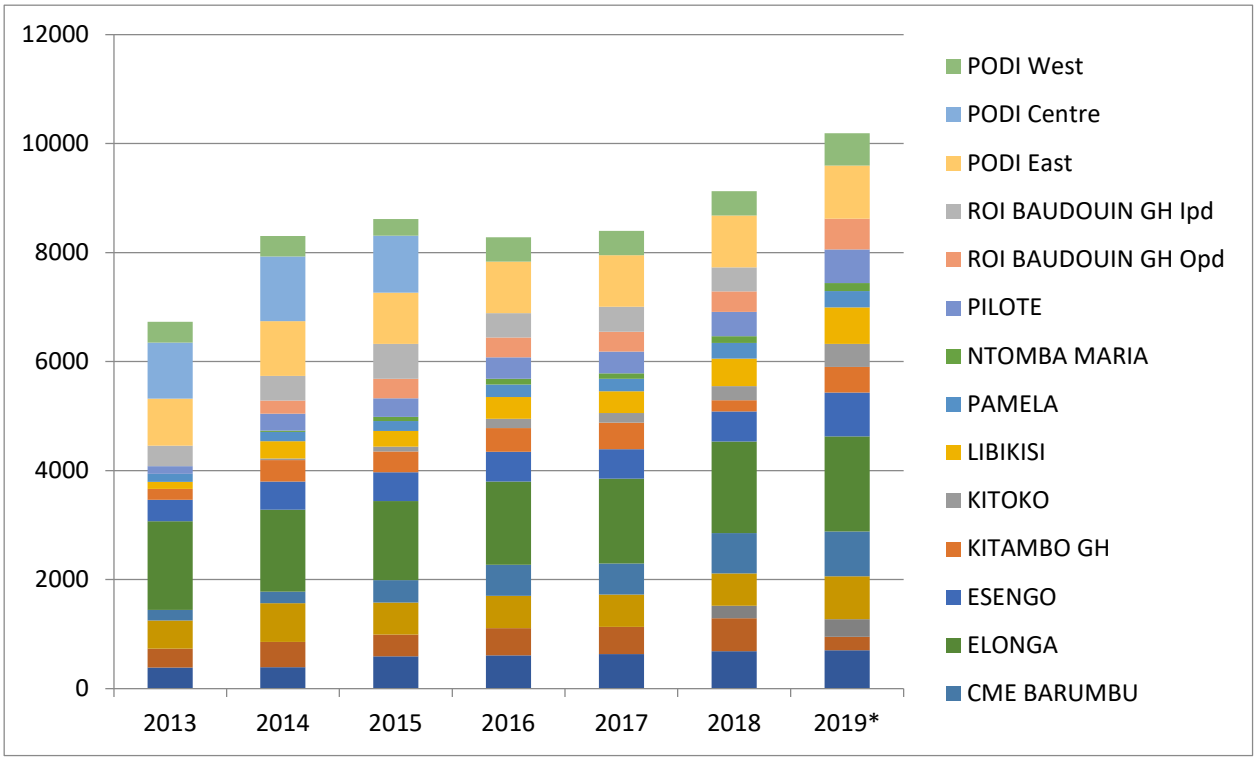


Figure 6: Distribution of PLHIV monitored by site and by year, from 2013 until 2019. *In 2019 data were available only for the first semester.

Note: Missing data was extrapolated with the average of the available data. Where there was no future or prior data, no data was inserted (i.e. PODI Centre and Bondeko HC).

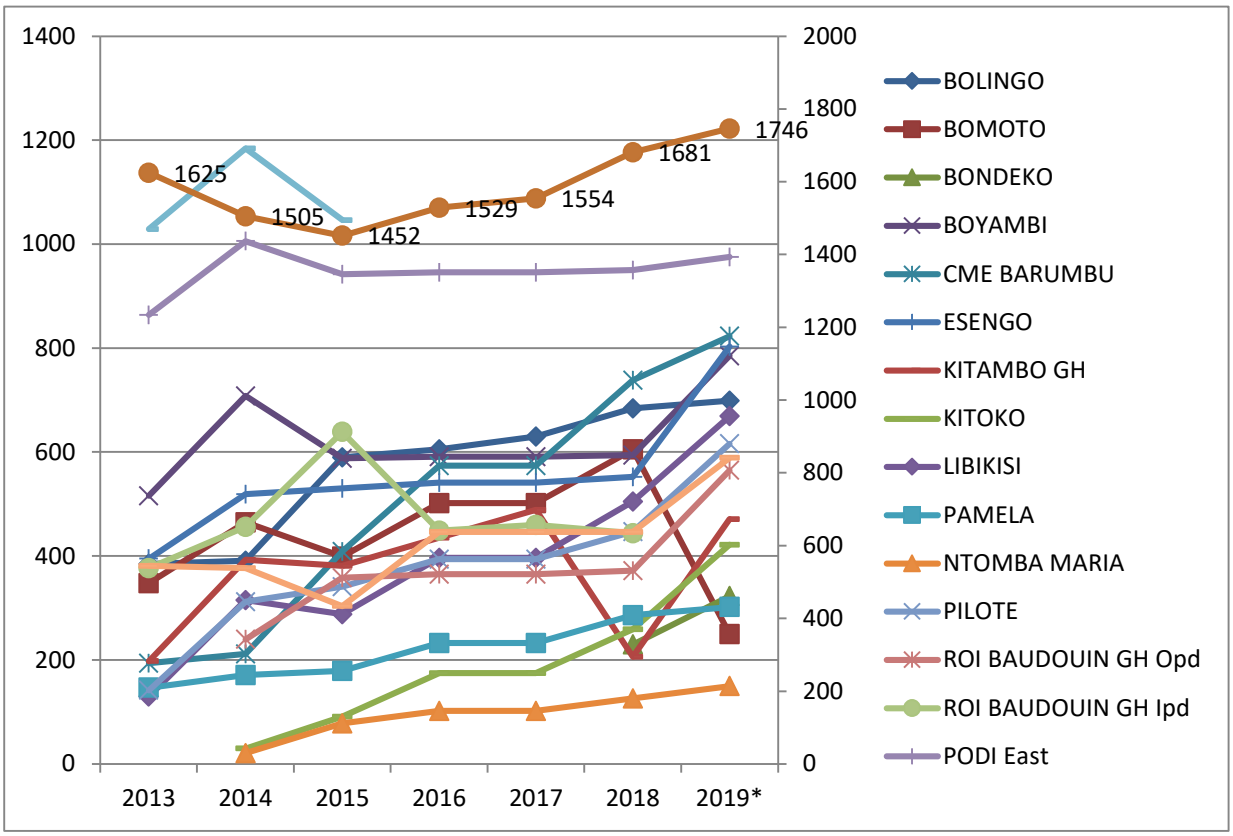


Figure 7: Trend in PLHIV monitored by each site, from 2013 until 2019. *In 2019 data were available only for the first semester.
Note: Missing data was extrapolated with the average of the available data. Where there was no future or prior data, no data was inserted (ie, PODI Centre and Bondeko HC).

Detailed quantitative data on the period after MSF's withdrawal are only provided from 5 out of 18 (28%) health facilities, of which only four (Bolingo, Elonga, Essengo and Libikisi) were health centres; cohort analysis is also available for Bomoto and Boyambi but performance indicators are not. Interpretation should therefore be cautious.

As indicated above, the number of patients followed increased gradually also after MSF withdrawal. The gender proportion of patients remained stable. The proportion of patients under treatment continued to increase, and the proportion of those under second-line therapy remained very low. CD4 remained over 300. For the small group of patients with data available between 350 and 380 days after treatment started (N=32), 87,5% had a VL below 1000cp/ml. Reported mortality also remained low, with the aforementioned caveat of the possible LTFU bias (the likelihood of underestimating mortality increases with the proportion of loss to follow up). This was not the case at the *Centre Hospitalier Roi Baudouin* outpatient clinic, where both mortality and LTFU rates remained fairly high. In other centres, the rates of LTFU decreased in health centres where this was measured, notably Elonga.

Difficulties Encountered from MSF's Withdrawal to Present

In addition to the somewhat positive findings described above, the evaluation identified specific difficulties which manifested after MSF's withdrawal:

1. **Lack of technical partners to support health staff**. The GF-supported zones are not as well-supported by technical partners as PEPFAR-supported zones are. Consequently, there is no regular technical monitoring to guarantee quality of care, data entry, and patient follow-up – particularly in areas such as VL testing and switching regimen from second to third-line treatment when necessary. In fact, data provided by the PNMLS shows that only a small number of patients in the GF area switched to a different treatment regimen, yet the third 90 indicator[8] remains a concern since national statistics show that only 11% of PLHIV on treatment have a suppressed VL.[9]
2. **Lack of maintenance of laboratory equipment**. Equipment is not operating to the same standards as it was when MSF was present. There is no maintenance of top-level equipment, and a lack of reagents and technician supervision. During the visit to the Roi Baudouin hospital laboratory, staff members were using a Pima CD4 analyser instead of a FACSCount, which was supplied during MSF's time. It was the only machine that still worked with a GeneXpert™ that had recently been provided by the National Tuberculosis Control Programme. While staff retention is high, such a decline in laboratory service quality has left staff feeling discouraged. For example, a FACSCount is likely too difficult to maintain and too costly for reagents for continuity of activities following MSF's departure; this has caused a lot of equipment to be abandoned when it is working and proving to be useful.
3. **Lack of free medication to treat minor opportunistic infections**, including skin diseases, means that PLHIV must buy them outside health centres, which is rarely an option. This lack of free treatment for OIs forces patients to decide what to prioritise spending their money on, and costs can quickly escalate to catastrophic levels and exacerbate most families' already-fragile financial situations. It is also a major stress factor for healthcare staff who helplessly witness the

[8] UNAIDS, "By 2020, 90% of all people receiving antiretroviral therapy will have viral suppression."

[9] PNMLS 2017 annual report, p 17.

deterioration of their patients' health. Following discussions with PEPFAR and GF implementing partners, it appears that this issue of treatment for OIs is currently being discussed. This issue may be resolved during the next grant cycle, starting in 2021, since the envelope covering these treatments has been put in the PAAR,[10] and should be submitted to a new review during the cycle. Indeed, during the current grant cycle, available funding has been insufficient to put all detected cases on treatment. The latest figures show a 51% coverage rate for people tested,[11] which is too low. The lack of nutritional support, which were distributed to CHK by MSF, has also been reported as a problem.

4. **Between 2014 and 2017, the issue of ARV stock-outs was a key issue.** MSF teams were aware of this situation before their departure and identified it as a problem area; however, aside from advocacy work, they were unable to find a solution. MSF worked with UCOP+, which hosts the treatment access Observatory and conducted a survey on the availability of medicine in 94 health facilities between 2015 and 2016.[12] The data collected shows that even though the situation has improved regarding adult treatment, it remains concerning regarding paediatric ARVs.

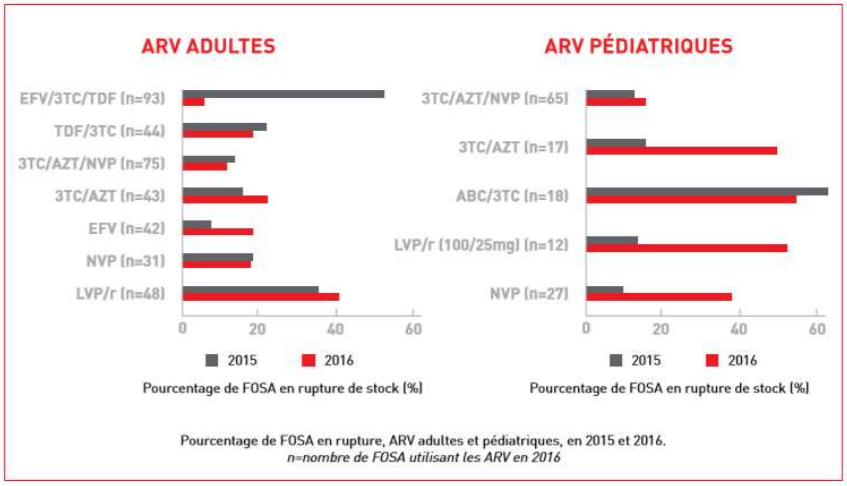


Figure 8 : FOSA percentages in stock-rupture. Source : MSF report, 2015-2016, Etat des lieux sur la disponibilité des intrants essentiels pour la lutte contre le SIDA à Kinshasa (available in French only).

Yet despite the progress, the availability of medicines clearly remains problematic, particularly for children and patients who need to switch to second-line treatment.

[10] PAAR (Prioritized Above Allocation Request): The PAAR represents key additional, evidence-based and costed modules and interventions for investments that are not included within the allocation amount. The country will be invited to submit an Unfunded Quality Demand (UQD) once some savings are realized after the 1st year of implementation. In any case, the amounts to cover OI treatments shall be available after 2021.

[11] Op. Cit, p 17.

[12] Situational assessment on the availability of essential medicine for the AIDS response in Kinshasa

Figure 9: Etat des lieux sur la disponibilité des intrants essentiels pour la lutte contre le SIDA à Kinshasa. Source: MSF report, 2015-2016 (available in French only).

However, it is noteworthy that stock levels were good further upstream and that medicines were available at the warehouse (at provincial or national level) during all the stock-outs at health facilities; in 44% of health centre stock-out cases, medicines were available in the Health Zone Offices (same results as in 2015). Evidently, there are challenges involved in transporting medicines from the central warehouse to the health centres. MSF's own findings in fact point to this very challenge, noting:

> "Among the factors influencing stock-outs that have been assessed, better results are obtained (fewer stock-outs) when supplies are transported directly to the health facility by a transport company with as few intermediaries as possible, compared to when ARVs are stored at the Health Zone Office and health facilities are responsible for collecting them (in exchange for financial compensation)."[13]

5. **PODIs sometimes experience stock-outs,** especially when financial constraints prevent fuel purchases prevent transport over the last few kilometres between the Health Zone Office and the PODI. PODIs particularly struggled with stock-outs during the shift to Dolutegravir for all first-line ARVs. Additionally, stock-out reporting tools at PODIs are lacking. These issues are especially visible in the areas covered by the GF, wherein no organisations support PODIs. Conversely, in the PEPFAR-supported zones, the package of services agreed by the donor includes direct ARV transport to the PODIs, and the reporting tools (patient registers) are available and verified by implementing agents paid by PEPFAR.
6. **The work and employment status of PODI staff are not optimal**. Communication and referrals at health centre level are not always performed properly. Health centres are sometimes reluctant to send patients to a PODI, even though each referred patient remains on that health facility's patient register. For this and other reasons, PODIs in return are slow to refer patients showing signs of complications. Additionally, several patients do not wish to leave the health centre to go to a PODI – particularly when they are registered at CHK. Moreover, several people stated that they fear stigmatisation as 'HIV patients' in their own neighbourhood and prefer to go to a PODI located near their work or commuting route, or to a health centre located outside of their neighbourhood. We must therefore consider that, while patient numbers at PODIs regularly increase due to PEPFAR's highly proactive policy of getting new patients on treatment, this represents only one of several differing approaches.

[13] Op. Cit, p 9.

Finally, and crucially, the employment status of PODI staff is very precarious. They receive a financial incentive instead of a salary, which barely covers their transport costs and does not constitute a stable income. Most staff members must look for another income source and work more hours or rely on their families to support themselves. Regardless, PEPFAR still considers the PODI model too expensive, and wishes to make it more profitable by drastically increasing the number of patients they receive. This seems dangerous in several respects: firstly, it increases the pressure on staff who are already fully-engaged; equally, organisations providing oversight support – in particular RNOAC – no longer have the capacity to adequately support PODIs as patient numbers continue to increase. Some PODI employees spoke of feeling abandoned, and feel they receive insufficient support for their roles of welcoming and advising patients, checking the registers, and holding supportive discussions with the most critical cases. Practices for coordinating with health centres vary across PODIs. PODI Centre has a monthly meeting allowing PODI staff to speak with the doctors and nurses at the referral health centres, but this is not the case in the other PODIs, who meet their referral centre twice a year (as is the case with Pilote Health Centre).

Comparing Services During and After MSF Support

Quantitative data for comparison of health centres during the period of MSF support and after its withdrawal is available from four health centres (Bolingo, Elonga, Esengo and Libikisi). Centre Hospitalier Roi Baudouin was supported by MSF during the whole period; cohort analysis conducted in Bomoto and Boyambi does not distinguish between MSF and non-MSF periods. More detailed information is presented in Annex III.

From 2013 to 2018, the number of PLHIV steadily increased in Bolingo and Libikisi health centres, for both men and women. In Elonga, the number of PLHIV was high (over 1,500) and remained stable for both men and women. All sites have a similar ratio of roughly ≥70% women and ≤30% men, which is typical across PLHIV cohorts in Africa.

The number of patients on ART increased across all sites for the entire period, but the proportion of patients on second-line regimens stayed very low throughout. The CD4 median for new patients was relatively high – over 300 CD4/mm^3 – but remained lower than the CD4 median for patients who had undergone longer durations of treatment. This may be interpreted as indicating good quality of care, although this interpretation could be biased.

The number of VL measurement tests was negligible before 2017 (fewer than 5% of treated PLHIV), and therefore the MSF and non-MSF periods cannot be compared. When measured, VL did decreased, and during this period more than 80% of PLHIV treated had a VL of <1,000 cp/ml. As mentioned, mortality was low but is most likely underestimated, except for Libikisi where the probability of retention at five years was over 75%, both for men and women.

In Elonga, the LTFU and reported mortality rates were acceptable and continued to decrease steadily following MSF's withdrawal, from 20% in 2013 to under 5% in 2018; IHAP's focused efforts on retention when they received Elonga from MSF seem to have made a positive difference. The centre currently has 1,630 registered patients. According to targets set by PEPFAR, it must register 20 new patients each month. IHAP follows up patients three times a week, and checks the files of new arrivals, patient registers, patient care records and VL results. They monitor LTFU patients and community activities. Based on their results, they receive a €4,086 monthly incentive. The centre referred approximately 700

patients to the PODI, and provided additional services such as adherence clubs, a fast-track channel (from which around 250 patients benefit) and support groups (with 250 people). At the time of this review, only 600 patients continue to receive care at the centre. The strategy of differentiated access to drugs seems to have helped the centre's good treatment results.

In Esengo, the number of PLHIV fluctuated from 2013 to 2018, especially those under treatment. There were 768 under treatment in 2013; 619 in 2014; 803 in 2015; and 651 in 2016, with an increase in 2017 (though no precise data is available for this year in the Table 3). This database is potentially unreliable.

SUB-OBJECTIVE 3:

IDENTIFY THE ENABLING FACTORS AND MAIN CHALLENGES FOR EACH OF THE DECENTRALISATION STRATEGY COMPONENTS (TRAINING, SUPERVISION, MENTORING, FINANCIAL INCENTIVES, LABORATORY SUPPORT, SUPPLIES OF HIV AND OI DRUGS, DATA MANAGEMENT, LOGISTICAL IMPROVEMENTS), FROM 2013 TO PRESENT.

The entire MSF HIV project became very comprehensive over time, both in terms of the decentralisation component and the management of advanced HIV. The internal and external enabling factors of decentralisation, as well as its challenges, are presented below. This analysis was conducted with the local team who had worked on the project from the start and was triangulated through a desk review of the organisation's archival documents.

External Factors Contributing to the Success of the HIV Project's Decentralisation Component

The GF's NFM implemented in 2014 marked a turning point in the funding landscape for the HIV response in DRC. Although MSF initially supported the costs of all treatments and laboratory tests, the guarantee of access to continuous funding from one three-year cycle to the next was a game-changer – both for MSF, which could now rely on GF funding for inputs and ART, and for NACP which was finally able to implement activities within a reasonable timeframe. In philosophical terms, moving from a model in which funding sums are requested and decided by the country (as part of the GF's cherished 'country ownership' approach) to a model that calculates and decides the allocation amount in Geneva could raise fears of a top-down relationship which places recipient countries in a situation of dependence. This is partly true, particularly since the governance and confidence crisis in 2011 resulting in measures to prevent financial embezzlement that exacerbated the unbalanced relationship between the GF and recipient countries. However, it ought to be recognised that this established and guaranteed source of funding has also created a favourable context in the country, allowing the government to set out a significantly more specific medium-term HIV strategy. Between 1999 and 2008, a single strategic plan was drawn up which, due to a lack of indicators and resources to verify its effects, was difficult to monitor. There was no plan in place to guide the HIV response between 2008 and 2010, until a new plan was developed in 2010.

What started out as an unprecedented pilot – the use of non-medical personnel to provide HIV prevention, counselling, and adherence services – has become widespread. The years 2000 to 2010 saw the issue of community health disappear, following a prosperous decade during which the Declaration of Alma-Ata endorsed the importance of primary healthcare and the community activities that go with it. The large vertical funds established in the early 2000s – such as the GF, soon followed by GAVI and Unitaid – conversely confirm the decision to accelerate the fight against the major epidemics through a vertical approach, in parallel with existing health systems. The issue of community health only re-emerged in the current decade, resulting from two issues: firstly, it was observed that investments in the health sector had only been modestly efficient, as the majority of investments went into responding to the major epidemics due to the continued increased in GF funding; secondly, it had been observed on numerous occasions that the absence of a community network seriously complicates prevention and access to rural populations, who remain the majority in Africa, particularly when responding to epidemic resurgences (cholera, Ebola, measles, etc.). Subsequently, between 2013 and 2018, 13 countries in the West and Central Africa region adopted community-based health strategies, which endorsed the important role of community health workers and CSOs as service

providers. In this context, the use of CBOs and CSOs has since become prevalent and countries are gradually authorising health workers to prescribe and distribute treatments under the supervision of a head nurse. This allowed MSF to work in an environment that was increasingly favourable to decentralisation and demedicalisation. One outcome of this process was the DRC MoH guide to decentralisation of services and task-shifting to improve access to HIV care and treatment, published in 2016.

Finally, this development has also enabled MSF to refocus its advocacy efforts on technical issues related to implementation rather than on financial issues. All MSF documents between 2005 and 2015 raised financial issues, as WB and GF funding in DRC had been insufficient, irregular, and poorly managed, making continuity of treatment challenging. However, this issue was no longer raised after 2015, and challenges such as advanced HIV, stock-outs, and paediatric care took centre stage in discussions. Nonetheless, the matter of free-of-charge treatment remains unsolved, particularly funding for the treatment of OIs and laboratory tests.

Internal Factors Contributing to the Success of the HIV Project's Decentralisation Component

Local staff members in the MSF team, who received ongoing training from the outset of the HIV project's decentralisation, were one of the most essential components behind the positive results in terms of coverage: local MSF staff members were able to gain the trust of staff at health centres and PODIs, and crucially the trust of the patients themselves. They ensured service continuity and constitute the memory of the project's successes and failures. They received training organised by MSF (which was accredited by the NACP) and daily supervision from international staff. Their daily presence in health centres to mediate and resolve any issues that arose is one of the main success factors cited by the HIV focal points at the health facilities visited. MSF staff members are present, versatile, and attentive to the challenges faced by medical staff. The strong psychosocial and counselling component developed during the project to support the decentralisation of patients who were reluctant to leave CHK proved essential. It enabled rapid dialogue with staff members at health centres, as compared to the first phase when transferring all the patients monitored by MSF from CHK to the health facilities was seen as disorganised, one-sided, and poorly planned. MSF staff members feel pride in being part of the organisation, in helping to implement an innovative project, and in having acquired solid skills (including knowledge of HIV, delivering advice, technical skills in M&E, laboratory activities, and procurement), which empowers them to participate in internal strategic discussions (i.e. Roundtables).

The highly ambitious package of services MSF provided as part of the project was clearly a crucial element of success during the years of MSF's presence in health centres. MSF not only provided a comprehensive and optimal care package (ARV supply, treatment of OIs, nutrition for undernourished people, psychosocial care, and laboratory tests), but also rolled out strong logistical interventions to rehabilitate health centres (purchasing incinerators, hygiene products, repairing electrical systems) and maintain laboratory equipment. The presence of MSF teams at health centres on a daily basis made the project agile: medical staff members felt confident that daily challenges – such as broken or lacking equipment and stock-outs – would be resolved quickly. This extremely comprehensive range of services was also provided free-of-charge, which provided health centre staff members with good working conditions without the stress of witnessing poor patients forced to purchase their medication and their health deteriorating.

MSF's improved capacity to interact with the MoH. After 2012 more recently, coordination improved between MSF teams, the authorities, and partners of the MoH. In 2012, an agreement between the two institutions established much clearer collaboration. A more robust NACP coupled with MSF's awareness that the HIV response cannot be carried out in health centres without close collaboration with the MoH were key to this major change. MSF also became an observer member of the Country Coordinating Mechanism (CCM), and a member of the MSF team attended its monthly meetings. Along with coordination around the selection of MSF sites, this structured dialogue helped establish a more solid link with the health authorities, who now express their satisfaction.

Developing practices to overcome problems. The decentralisation component was able to evolve and adapt to the challenges encountered during implementation. For example, incentives are now provided to all members of health centres, and no longer only to staff directly in contact with PLHIV, which has helped avoid disagreements within health facilities. Additionally, dialogue with health authorities up to health zone level has been greatly strengthened. Finally, the training and monitoring programme for peer educators to support patients and staff is an important and complementary initiative of this project, which has been championed and replicated across the country, creating a functional 'nursing model' to compensate for the lack of doctors. This decentralisation has therefore engendered many innovative interventions, which are now included in the national decentralisation and task-shifting policy. UNAIDS now widely disseminates the range of differentiated approaches that allow for multiple entry points to provide testing and treatment initiation services, and they advise that these approaches should be included in GF concept notes.

Challenges Faced by the Decentralisation Process, Many of Which Remain Unresolved To-Date

Insufficient retention rates and uncertainty regarding the causes. During the entire period of MSF support, there was a significant LTFU rate at most of the MSF-supported sites. As the data analysis shows, some health facilities had a LTFU rate of between 20% and 30% of patients once registered. Unfortunately, MSF teams never launched a comprehensive study to explore and understand the reasons behind patients disappearing. In some cases, handovers to partners such as IHAP had positive effects on the retention rates, resulting from proactive measures to actively look for patients to re-enrol them at the health facility. For example, IHAP was handed over support of two health centres: while the high LTFU rates were not exclusive to MSF centres, clearly MSF's results were not significantly better than those of other partners. Some qualitative studies were conducted to highlight this problem, but even if the causes were uncovered, they do not seem to have affected any change.

Table 4: Retention rate at 12, 24 and 60 months after treatment initiation, by centre. MSF decentralisation HIV project, Kinshasa 2019.

HEALTH CENTRE	12 MONTHS	24 MONTHS	60 MONTHS
BOLINGO	88.9% (86.6 – 90.8) N=672	86.7% (84.2 – 88.9) N=553	85.0% (82.3-87.4) N=298
ELONGA	77.8% (76.2-79.3) N=2009	71.8% (70.1-73.4) N=1699	62.4% (60.5-64.3) N=1104
ESENGO	85.6% (83.3-87.6) N=819	83.0% (80.6-85.2) N=728	77.3% (74.5-79.9) N=471
LIBIKISI	88.8% (85.7-90.0) N=736	83.6% (81.0-86.0) N=649	77.2% (74.1-80.0) N=393

Controversies and disagreements concerning free-of-charge service provision and the cost of this intervention have been implicit since the beginning of the decentralisation. MSF applied a policy of non-recovery of costs, and it has always covered expenses linked to the HIV project. Since 2005, the total cost of the project has been around € 40 million, with a regular annual increase of around 15% bringing the current annual cost to just over € 5 million. Although these costs were feasible for MSF, laboratory tests, OI treatment, and hospitalisation costs ceased to be free-of-charge when MSF ended its support for the facilities. MSF conducted a cost analysis its model of care in partner hospitals in order to negotiate funding from donors; this study showed that 37 patients receiving care in hospital would incur a lump sum reimbursement cost of approximately $4,000.

Table 5: Monthly reimbursement amounts, by hospital. *Source: Etude de coûts: hospitalisation des PVVIH à Kinshasa, DRC, April 2017. Quentin Baglione.*

MEDICINE	TARIF UNITAIRE (USD)	NB SORTIES AU COURS DU MOIS (CHRB)	TOTAL (USD)
GHM1	149	12	1 790
GHM2	166	3	497
GHM3	114	1	114
GHM4	163	4	653
GHM5	149	5	746
GHM6	266	1	266
GHM7	105	1	105
GHM8	135	0	0
GHM9	196	3	588
GHM12	68	2	135
TOTAL		32	4 892

SUB-OBJECTIVE 4:

ASSESS HOW PAST DECENTRALISATION EXPERIENCES IN KINSHASA HAVE INFORMED THE CURRENT STRATEGY (WHICH STARTED IN 2017) AND WHAT CHALLENGES CAN BE ANTICIPATED.

The lessons learned by MSF during this period of decentralisation, together with the findings and specific elements identified by this evaluation, allow the evaluators to anticipate challenges which may be encountered in the new decentralisation model. Some are listed below, pending a more focused evaluation of the current model which should take place in 2020.

There is a strong pressure to increase new patient enrolments in this system, based on the notion that health centres and PODIs can absorb far more patients than they currently treat. PEPFAR estimates that a PODI should be able to accommodate twice the number of patients than they currently do (i.e. around 2,000), and it seeks to develop this model in 2020. However, limitations to the model have already come to light in interviews and focus group discussions, such as: 1) a lower quality of follow-up from CBOs, shown by a decrease in visits to PODIs, less time to exchange with supervisors, no supervision at all at the PODI currently supported by PEPFAR; 2) a lack of respect for certain referral and counter-referral regulations, according to the staff working at health centre-level and PODIs; 3) Staff members are increasingly exhausted and lack motivation.

The number of patients LTFU up at health centres analysed in this evaluation framework indicates difficulties in preserving follow-up quality, which raises serious questions concerning this model's capacity to be scaled up – in particular, the question of how so many new patients could possibly be monitored. PEPFAR believes that the model can be replicated by ensuring the availability of necessary space and human resources. It is true that *prima facie* the rate of LTFU up is lower than in the GF-funded zones, if the data shared from the national system and analysed in Annex III are correct. Monitoring carried out by PEPFAR's implementing organisations (IHAP, ICAP and EGPAF, this last one replaced since October 2019 by HPP) appears robust, with staff regularly visiting health centres and carrying out refresher training.

This also raises the question of the quality of mentoring: how does one ensure that mentoring remains feasible and can be replicated on a greater scale? Mentoring is based on a very personal and close relationship between mentor and mentee, which requires energy and availability. MSF developed the idea of using a 'lighter', less time-consuming, and resource-intensive version of training staff and then transferring health facilities, so as to increase the rate and the number of patients enrolled in treatment. This involves a more standardised methodology, with pre-established training modules and a more formatted 'pathway' for mentees and is therefore less individualised. This is undoubtedly a strategy to develop and document in the next phase.

Harmonisation of the care package provided to patients in Kinshasa. The evaluators noted differences in many zones between what the GF and PEPFAR finance and cover, demonstrating that patients are not consistently accommodated in the same way across Kinshasa:

Table 6: Observed differences between GF and PEPFAR zones.

CARE PACKAGE ELEMENTS	GF ZONES	PEPFAR ZONES
Higher staff incentives		✓
More robust supervision		✓
Targets for testing and enrolling new patients are informed by MoH targets	✓	
ARV supply and procurement conducted in parallel to national system		✓
Roll-out of Dolutegravir completion, as of September 2019	(still in planning phase)	80%

A related issue is determining which package is acceptable to all stakeholders in order to adapt to the context and the resources available. This issue requires urgent resolution, because the current disparity in quality between services provided within one city – and sometimes within a few hundred meters – is unsustainable for the MoH. Discussions between donors and implementing partners on this subject are too rare. The GF aligns with the strategic priorities contained in the National Strategic Plan and with the recommendations of WHO and UNAIDS; PEPFAR applies its own standards without participating in the discussions, and MSF follows its protocols. The country dialogue initiated prior to the development of the concept notes provides an ideal framework for conducting these discussions, and equally partners involved in the HIV response should be stakeholders in the PEPFAR Country Operational Plans. The NACP does not seem to be sufficiently strong to chair these discussions, while the CCM has not succeeded in gathering together all relevant stakeholders around the table.

The issue remains unresolved. The flat rate staff incentive paid by PEPFAR is higher than the incentives paid by the GF. The upcoming negotiations for the next GF financing cycle (2021-2023) present a window of opportunity to renegotiate the rates applied by the GF and the services that will be included in the price. PEPFAR has not been entirely opposed to funding treatments for simple OIs, which is reaffirmed by the 2020 PEPFAR COP Guidance that states that OI treatment should be given for free; they are however much more reluctant to maintain the standards introduced by MSF, in particular regarding laboratory or hospitalisation costs.

However, PEPFAR's recent decision to end the cost recovery system for PLHIV in Cameroon regardless of the services used could possibly be extended to other intervention countries. The GF has commissioned a study on financial barriers to accessing testing and treatment services related to pandemics; the results should be available before the board of directors meeting in May 2020, and it is expected that this report will highlight ways of ending out-of-pocket payments by patients, which remain the primary source of health service funding in many countries.

Insufficient patients are retained on ART following facility handovers from MSF to other partners, and this represents a major failure. Even if a number of recorded LTFU are in fact mislabelled deaths (as is inevitable), the rate of patients LTFU is concerning, especially as some of these patients will later return to CHK at a very advanced stage of AIDS. It seems essential to investigate this phenomenon in depth so as to better understand the reasons that push patients to give up on their treatment, and also to design an intervention component to combat this loss of patients.

MSF has gathered very little information on how key populations are supported over the years. The approach selected by MSF was intended to be community- and not identity-based, is not focused on vulnerable groups. However, in DRC as elsewhere, the most discriminated groups are at a much greater risk of HIV infection, as described in the 2017 UNAIDS report. It is crucial to investigate how to properly target key populations (men who have sex with men, injecting-drug users and sex workers) with the project; there is currently no information available on the potential barriers that these groups might encounter in accessing services in health centres and in PODIs. With the closure of AMOCONGO, there is no longer a robust organisation to support these target groups who are particularly discriminated against, as shown by the discrimination index calculated in 2012 on the basis of a survey carried out with UNAIDS support.[14] The index revealed that 25% of people surveyed had experienced social or family exclusion, that 50% had been dismissed from or stigmatised in their work, and that more than half discriminated against themselves because they were ashamed of their HIV status. Such self-discrimination, usually manifesting as a fear of being badly treated or stigmatised, often prevents access to care facilities. MSF teams have not assessed the 'attractiveness' of their approach for particularly vulnerable groups, and seek to adapt the system to their needs, which could be a limitation of the current strategy.

From a clinical perspective, CHK has highlighted the importance of providing care to patients with advanced HIV with a CD4 count of under 200. However, despite the efficacy of ART, in countries such as DRC where many patients still find out their status very late or have given up on treatment for a variety of reasons, there will still be patients who reach this advanced stage for a long time in the future. CHK is an excellent place to care for those patients, but has limitations: it has been developing strategies to keep on top of the large number of patients for the past 15 years, but choices are also needed; the costs of caring for some OIs such as Kaposi's sarcoma are very high, and make it impossible to reach sustainability. The provision of free meals during hospitalisation is commendable, but as far as the evaluators are aware, it is not offered in any other health facility in the country, which makes CHK very attractive and contradicts the objective of limiting the influx of patients.

Finally, the question remains as to how to speed up the decentralisation process in order to put patients on ARVs in a sustainable manner as quickly as possible. The current model advocated by MSF is ambitious, and internal reflections in recent years have focused the discussion on a less complete, 'lighter' model, so that the handover is easier for the MoH or financial partners to take over, and simpler for the structures and patients. This 'lighter' model is subject to contradictory challenges that were clearly identified by the teams during the last Roundtables. These include: 1) how to ensure sufficiently solid and complete training (including formative supervision and retraining) without creating an overly ambitious, costly and time-consuming educational system; 2) how to measure the necessary investments in equipment – especially laboratory equipment – without implementing a technology whose maintenance is then made impossible due to lack of financial means and skills; 3) what package of services could be offered to patients that meets the quality and ethics of MSF and international standards, without surpassing the capacities and standards that the MoH and its financial partners could reasonably maintain following MSF's departure. These will need to be considered during the next Roundtable.

[14] People living with HIV stigma and discrimination index, Survey report, UNDP / UNAIDS, 2012.

CONCLUSIONS

A detailed retrospective analysis of the decentralisation of HIV care in Kinshasa shows that, despite certain inconsistencies in the strategies implemented over the past 15 years, MSF has been guided by the intention to respond to a critical need for HIV care. While the first phase (2005-2008) was too disconnected from the health system and DRC authorities, it already bore the principles that made decentralisation a success, including: high-quality hospital level service for complications; integrated care at health centre level, supported by MSF staff for training in care and the provision of medicines; and the introduction of community counsellors to ensure follow-up and reduce LTFU rates. Subsequent phases refined the model, creating an additional, community-based level of decentralisation (creation of ART distribution points), structuring capacity transfer around the mentoring methodology, and developing a lighter, faster model to scale up the integration of care services in the city.

Quantitative data show a different evolution pattern at each site, but some elements are shared by most: the F/M gender ratio of roughly 70/30; the general increase in patients over time, and the very low number patients on second line ART. The median CD4 is roughly 249 cells/µl for new patients, and 393 cells/µl among patients treated for longer. A good level of VL measurements was performed from 2017, and a good proportion of patients had undetectable VL. Reported mortality was low (except in Kitambo) and the LTFU rate varied between sites, most often and likely including undeclared deaths. Retention in care is a cause for concern in certain health centres, with LTFU rates as high as 20% to 30%.

The decentralisation model has been adopted (through the guidelines on task-shifting produced by the MoH in 2016) and is promoted by both GF and PEPFAR. In that sense, the intervention can be described as successful in having created an enabling environment by means of a robust and proven model. GF is now funding the PODI Centre, and PEPFAR is supporting the PODI Ouest and Est with ICAP as implementing partner; all these centres were handed over by MSF. As far as the GF is concerned, the concept note already includes financial support to PODIs, and more PODIs will be funded for the next cycle. PEPFAR plans to open ten more PODIs on the same model both in Kinshasa and elsewhere, including Ituri, Haut Katanga and Aisiro. PODIs are regularly presented in regional discussion fora as one of the successful strategies to scale up access to treatment with no additional burdens placed on the health system. A November 2019 workshop organised by UNAIDS in Saly provided an occasion to revisit the differentiated approaches and the advantages of decentralisation. Other countries in the region (including Congo Brazzaville) are now planning to open PODIs following MSF's community-based model, and will receive GF resourcing to support them.

MSF should have focused its efforts on the GF-supported health zones that lack strong international organisations, similar to those that collaborate with PEPFAR (ICAP, IHAP, EGPAF) who are capable of providing regular health centre supervision. However, as shown on the map (Figure 5, p29) until 2017 MSF elected to support 19 facilities located in PEPFAR-supported health zones and only 13 in the GF-supported areas, as more PEPFAR facilities met the necessary criteria for project implementation. These criteria included having a large cohort of patients, a well-functioning laboratory, and the

presence of partner organisations capable of resuming support after MSF's eventual departure. Although there were more pressing needs for support in the GF-supported health zones, MSF often chose security and a favourable environment to ensure the success of its model, which coincided with facilities supported by PEPFAR. This decision had two major consequences: health centres located in GF-supported areas continued to receive very little support, which in turn affected the inclusion of new patients and the retention of patients already on treatment, as NACP figures confirm. Therefore, the decentralisation model can only be said to work in a favourable and enabling environment. While the model ostensibly demonstrates a good cost-benefit ratio, it is only being tested in a favourable environment wherein PEPFAR invests significant resources into staff training, patient follow-up, and support to CBOs. Therefore, this model has not been demonstrated as feasible with fewer resources available to support staff and activity supervision, and a when delivering a larger package of services.

MSF's added value in this area seems to lie in mentoring, training, and advocacy, which the evaluators believe are **the major strengths it brought to the approach**. These three added values could be scaled up to accelerate decentralisation (with the development of new concept notes feasible by March 2020), in particular by supporting the MoH to negotiate and standardise the approach with GF and PEPFAR, the main donors. Furthermore, this type of intervention has been widely implemented in English-speaking Africa (Eswatini, Malawi, Kenya and South Africa), but only small steps have been taken in the West and Central Africa region, which is still far from reaching the 90-90-90 targets. MSF can provide technical support to other countries and CSOs in order to support decentralisation in the region; the Central African Republic has begun adapting the model, and Guinea is introducing an interesting version of it.

RECOMMENDATIONS

As mentioned, this evaluation has not assessed the current decentralisation strategy operational from 2016 to present. Specific recommendations and suggestions should therefore be considered as valid and applicable insofar as they have not already been implemented and do respond to challenges which are still present.

⇒ **Recommendation 1:** Simplify, strengthen, and intensify training for mentors for the development of mentoring activities, – one of MSF's main strengths – with a specific refresher training approach for health staff trained since 2016. This methodology could also be shared with PEPFAR and its implementing partners (IHAP, ICAP, EGPAF) that also support the health staff at facility level.

⇒ **Recommendation 2:** In order to speed up access to testing and treatment services, develop a 'light decentralisation' model following these principles: shorter training and longer mentoring (with the possibility of collaborating with senior managers of health centres to supervise new arrivals); one-off support and a minimal package of services; and simpler withdrawal processes during MSF's departure. As some of these new modalities may be innovative, MSF may be interested in piloting them in some centres to see how they work (implementing them in parallel and measuring their effects on key indicators). Potential options to be considered for this light approach model are presented below:

1. A rotation system in the health centres and PODIs, so that the most senior staff can start activities in the most recent centres and PODIs and provide support for the activities.

2. Drawing differentiated packages:
   a. A zonal approach: like what is already in place with a 'mother' centre and 'satellite' centres offering a smaller package (screening tests).
   b. A 'tailor-made' approach by geographic area of intervention: map the areas where the majority of people living with HIV are concentrated, identify the weaknesses of the health facilities, and offer only part of the priority packages (capacity building; laboratory; community activities; improvement of the drug circuit; data reporting).
   c. A progression path for each component: draw up a standard roadmap for each component (which develops to a final stage of sustainability guided by a series of preconditions), and then assess, identify and provide specific support to structures on this scaled path. MSF may not favour this option as it is very demanding and less flexible.

⇒ **Recommendation 3:** If PEPFAR and GF confirm their intention to support PODIs, scale up PODIs (continue to support RNOAC staff and other PLHIV organisations) and transfer the most senior staff to the new PODIs in order to ensure that skills transfer from experienced staff members onto new ones, and to provide them with career progression opportunities. In addition, discuss the formalisation of PODIs, as they are currently perceived in very different ways (by Cordaid, PEPFAR, RNOAC) and their practices are diverse. This may not be a problem if the minimum conditions for success are defined. As a community-based approach, the aim is not standardisation, but rather to identify the conditions for success that should be established before starting new PODIs.

⇒ **Recommendation 4:** In order to monitor the quality of care and the stability of patients, conduct a study over the next three years on a small number of registered patients, at a health facility recently handed over from MSF to a partner facility, to assess patients' access to services and

satisfaction levels and to understand their reasons for leaving. There is also a need to locate LTFU patients in order to try to measure the number of deaths occurring. Additionally, gather information on patients within the MSF cohorts who are not on treatment (and the reasons why, even if we can assume that there are very few in 2019-2020).

⇒ **Recommendation 5**: Assess the accessibility and quality of services for key populations in order to measure the need for a specific service provided through PODIs. MSF teams are currently considering a PODI specifically for key populations. It may be useful to contact existing key population organisations to discuss the possibility of training their staff to open a dedicated PODI. Studies on barriers to accessing testing and treatment for these population groups are already available, as is a mapping of CSOs working towards meeting the 90-90-90 targets. These are important documents for referral as a starting point for dialogue and to identify the most relevant strategies.

⇒ **Recommendation 6**: Design a thorough handover strategy for transferring health facilities to partners based on the following principles: minimum standards of quality of care (with preparation for a transition between MSF's high standards and those guaranteed by the partners), a good communication strategy, and sensitisation of both health centre staff and patients. Past handover experiences in other MSF HIV projects – such as the steering table implemented in the MSF-OCG project in Kenya (for the transfer of Homa Bay Hospital to the MoH), or the tripartite partnership trial (Ministry, organisation or donor, MSF on specific aspects) – are interesting avenues to be explored at the next Roundtable.

⇒ **Recommendation 7:** Support and strengthen the NACP through regular information meetings and regular coaching with the field coordinator, and strengthen MSF's presence within the CCM in order to address two main areas:

1. The elaboration of joint 'minimum' standards with the MoH and its partners to harmonise interventions and the delivery of care across Kinshasa, adding simple OIs and skin diseases to PEPFAR's programme.

2. The need for NACP support in strategic decisions and dialogue with financial partners, in particular PEPFAR, who are involved in the HIV response without oversight from accountability mechanism and who do not share their data, while setting their own testing and treatment enrolment targets and maintaining their own procurement system, etc.

ANNEX I: EVALUATION TERMS OF REFERENCE

Terms of Reference

Subject/Mission	Decentralization activites in Kinshasa HIV Project
Commissioner:	Operations Coordinator Cell 1 (Emmanuel Lampaert)
Evaluation Focal Point	Medical Officer Cell 1 (Vincent Lambert)
Consultation group	Medical Officer Cell 1 (Vincent Lambert); DRC MedCo Deputy (Maria Mashako); Kinshasa HIV PC (Pascaline Rahier); SAMU HIV/TB Advisor (Gilles Van Cutsem);
Starting Date	Starting in the July-mid September period, preferably as early as possible
Duration	From 2005 until today

MEDICAL HUMANITARIAN CONTEXT

According to the Programme National de Lutte contre le SIDA (PNLS), the DRC has a national HIV prevalence of 1.2% and is considered a low prevalence, low coverage country. The prevalence varies from one province to another (Kinshasa: 1.6%, Maniema 4% and Bas-Congo 0.2%), but in general the prevalence is higher in urban zones than in rural areas and women are more affected than men (1.6% vs. 0.6%). Only 40% of those living with HIV/AIDS are currently on treatment. HIV/AIDS remains a deadly threat in the country, with alarming numbers of patients presenting in such an advanced stage of the disease that they need immediate hospital care or are too late for treatment.

Since 2002 MSF-OCB runs a HIV/AIDS programme in Kinshasa at different levels of care. The current project includes care for advanced HIV disease (AHD) at Kabinda Hospital Centre (fully MSF hospital), where care has been provided for more than 2,000 patients in 2018. MSF-OCB also supports, through the decentralization component, the HIV/AIDS activities of two MoH hospital structures in the city, three health centres and one “post de distribution communautaire”(PODI).

This component of decentralization and integration of HIV / AIDS care in primary health care was introduced in the project in 2005. The aim of decentralization activities is to improve health care access and quality in different health structures of Kinshasa (testing, treatment for children and adults, psychosocial support, follow-up, pharmacy and laboratory management, data collection). Many changes and adaptations in the decentralization component were introduced since it started, including operational strategies, selection of targeted centres, and type of support offered by MSF.

REASON FOR EVALUATION / RATIONALE

The evolution and history of the decentralization activities were documented through the regular monitoring and annual revision processes. To date, however, the rationality and the results of this decentralization strategy (and its strategic changes) were not formally evaluated.

This evaluation is designed as part of a wider process to appraise decentralization strategies in Kinshasa. This first exercise will focus primarily on the past MSF experiences in Kinshasa and how these informed the current strategy. The present document focuses exclusively on the first exercise.

A second evaluation exercise is foreseen in 2020, focused on the results of the current decentralization strategy in Kinshasa, started in 2016 (i.e. integrating hospital level, and notably Roi Baudoin and Kintambo).

OVERALL OBJECTIVE and PURPOSE

This evaluation aims at assessing the decentralization strategy and its implementation (since 2005) as part of the HIV project in Kinshasa. It focuses on reviewing its appropriateness, effectiveness and efficiency, with special attention to its results until today with regards to access and quality of HIV care for the targeted populations.

The findings of this evaluation will be used by MSF to inform ongoing discussions about the future plans of MSF decentralization strategy in Kinshasa for the next five years.

SPECIFIC OBJECTIVES

1) Describe the phases of decentralization strategies in Kinshasa, their rationale, evolutions, objectives, targeted facilities and related activities. From 2005 until today.

2) Assess the evolution over time (outputs and outcomes) of HIV services in the MSF supported facilitates (Health Centres and PODIs). From 2013 until today.

3) Identify the enabling factors and main challenges for each of the different components of the decentralization strategy (ie: trainings, supervision, mentoring; financial incentives; laboratory support; HIV and OI drugs supply; data collection; logistic improvements). From 2013 until today.

4) Assess how the past decentralization experiences in Kinshasa informed the current strategy (started in 2016) and which challenges may be anticipated.

EXPECTED RESULTS

- Evaluation report including:
    - Description of the phases of the decentralization strategy in Kinshasa project
    - Evolution over time of HIV services in MSF supported facilities

    - Identification of enabling factors and challenges of the main components of the strategy
    - Assessment of which elements/factors from the past decentralization experiences informed the current strategy
    - Conclusions
    - Recommendations
- Debriefing at field level to MSF and MoH
- Ppt for presentation of results

TOOLS AND METHODOLOGY PROPOSED

- Review and analysis of project documents and other relevant MSF documentation
- Analysis of medical data from facilities registers and MSF reports (during MSF support and currently)
- Interviews with MSF stakeholders at HQ and field levels
- Interviews with MoH and other relevant actors (i.e.: EGPAF; ICAP; CORDAID; RENOAC)
- Interviews or focus groups with patients & health care workers
- Direct observation of health facilities (Health Centers and PODIs supported from 2013)
- Review of relevant external literature

RECOMMENDED DOCUMENTATION:

- Project proposals, logical frameworks
- Monthly, quarterly and annual reports
- National reports, guidelines and policies
- Scientific and grey literature

DISSEMINATION OF THE EVALUATION

- In line with transparency and accountability objectives, the evaluation results will be shared both internally (within MSF) and externally (with key stakeholders at local and international level)
- More detailed dissemination plan will be agreed during the Inception Phase.

PRACTICAL IMPLEMENTATION OF THE EVALUATION

Number of evaluators	1
Timing of the evaluation	Starting in the July-mid September period, preferably as early as possible
Required amount of time (Days);	
• For initial desk review and preliminary interviews (Days)	3
• For preparing Inception Report (Days)	2
• For field visits (Days)	15
• For additional interviews/data collection (Days)	3
• For data analysis & writing up evaluation report (Days)	6
• For working session and finalizing report (Days)	3
• For presentation of results (Days)	1
Total time required (Days)	33

Notes: Preliminary findings to be shared with commissioner and consultation group early October 2019 (to feed ARO discussions).

PROFILE /REQUIREMENTS: EVALUATOR(S)

- Public Health and/or Epidemiological background
- Experience on HIV programmes in low income and/or low HIV prevalence countries
- Proved experience in evaluation methodology
- Fluent in French and English
- Experience with MSF and/or decentralization programmes is an asset

ANNEX II: MSF ANALYSIS OF MAIN PARTNERS

Table A1: MSF analysis of main partners organizations, from 2005-2008 (First Decentralisation Phase).

SALVATION ARMY	BDOM
More than 1,300 PLHIV on ARVs were monitored within the SA Kinshasa health network (5 sites: Elonga health centre – Masina II health zone, Hôpital Roi Baudouin – Masina I health zone, Centre Hospitalier de Maluku I health zone, Boyambi health centre – Barumbu health zone, Bomoi health centre – Ndjili health zone). **Strengths** ➢ Free care is provided to patients we transfer to them, ➢ Teams are motivated, ➢ Proximity of the Elonga centre to the 'Biso na Biso' centre. **Weaknesses** ➢The Salvation Army is a Global Fund's sub-recipient and does not have the capacity to deal with recurring programme issues, ➢Pharmacy management is sometimes problematic when it comes to ARVs.	The BDOM network provided primary health care in 25 Health Zones in Kinshasa; it had 1 general referral hospital (GRH), 5 hospital centres, 14 maternity wards, 50 health centres (including Bondeko), and a hundred health posts. In terms of HIV and AIDS activities, the BDOM-Kinshasa network had around 1,200 patients on ARVs in their 11 HIV services facilities. **Strengths** ➢ BDOM was a functional health network with a large geographical coverage. ➢ Quality and continuity of services benefited from strong support from the international NGO Cordaid, ➢ Effective pharmacy management, ➢ Centres mainly implemented the simplified HIV care model, ➢ Good collaboration with the Liziba hospital centre for patients' hospitalisation. **Weaknesses** ➢ Strong reluctance to provide free HIV and AIDS services.

MINISTRY OF PUBLIC HEALTH	NATIONAL NETWORK OF COMMUNITY-BASED ORGANISATIONS / PLHIV SUPPORT GROUPS
MSF worked in collaboration with the MPH within the Binza Ozone health zone, where MSF supports HIV care integration into the Mfinda health centre.	10 groups were operational in 2006 in Kinshasa.
Strengths ➢MSF medical expertise is widely recognised by the National AIDS Control programme (NACP) and the 2 organisations regularly collaborate to review national standards.	**Strengths** ➢ Strengthened treatment adherence among PLHIV ➢ Combating stigma: thanks to HIV support groups, many patients have learned to accept their status and to come out of hiding. ➢ Comprehensive care and community-based support: decentralisation of support groups has helped to create new services in several neighbourhoods in the city of Kinshasa, which had not previously had access to those services. ➢ Strengthening the capacity of PLHIV to self-manage. ➢ Synergy potential for several types of psycho-social support activities, such as identifying patients lost to follow-up, home visits and palliative care, support for hospitalised patients, strengthening treatment adherence support and nutrition education
Weaknesses ➢This first decentralisation phase was carried out without any meaningful consultation with the Ministry ➢The proliferation of Congolese institutions working in the HIV and AIDS response does not particularly facilitate discussion and the sharing of experiences. Reporting was also complicated	**Weaknesses** ➢ Insufficient geographic coverage ➢ There is no specific support group for adolescents ➢ There is not yet a support group for Biso na Biso (for sex workers). ➢ Competition among CBOs and between CBOs and the network

ANNEX III: QUANTITATIVE DATA ANALYSIS

This annex presents detailed information of some of the health centres supported by MSF as part of the decentralisation strategy. It includes a description of some quantitative data regarding the provision of HIV care and its interpretation. It covers a total of eight health structures (six health centres and two hospitals).

GRAPHICAL PRESENTATION OF PATIENTS ON ARV IN FOUR HCS

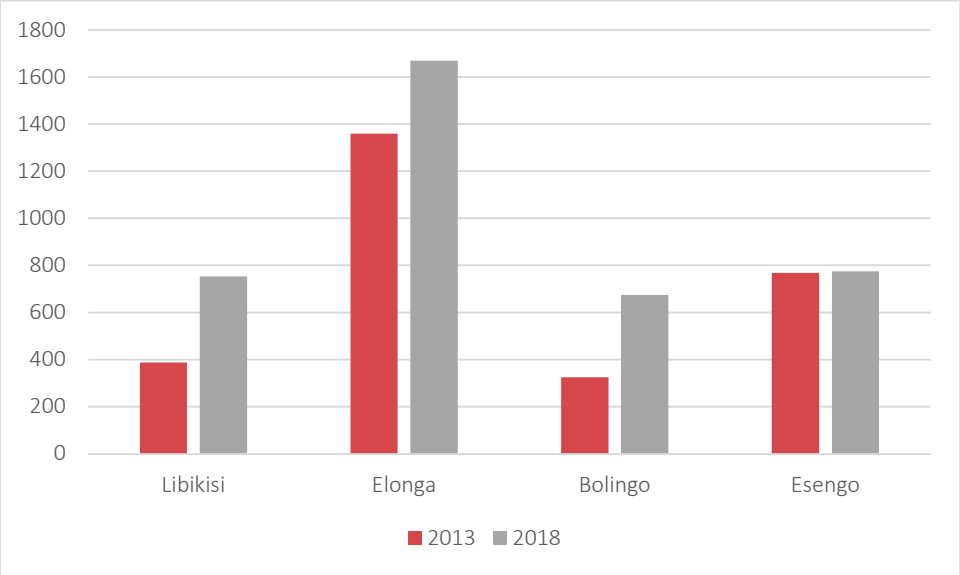


Figure A1: Number of patients on ARV in four health centres (Libikisi, Elonga, Bolingo, Esengo), 2013 and 2018.:

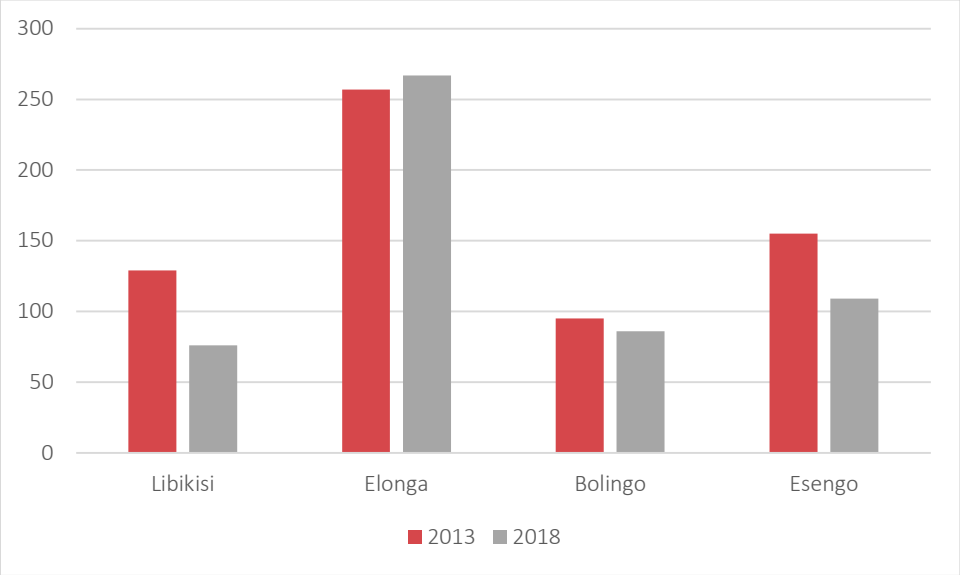


Figure A2: Number of new patients on ARV in four health centres (Libikisi, Elonga, Bolingo, Esengo), 2013 and 2018.

LIBIKISI HEALTH CENTRE

This MoH facility, where MSF was involved from 2013 to 2015, is now supported by IHAP (PEPFAR). Patient registers from 2013 to 2019 were made up of 723 (72%) women and 281 (28%) men living with HIV. 74 (7.4%) PLHIV were not on treatment, 918 (91.7%) PLHIV were on first line antiretroviral treatment and 12 (1.2%) were on second line, with a higher proportion of men receiving second line treatment (7/250 versus 5/680, p = 0.013). Among these 930 PLHIV, 24 (2.8%) PLHIV died between 2016 and 2019, and 263 (28.3%) were LTFU between 2013 and 2019. The proportion of deaths 9/250 (3.6%) and 15/680 (2.2%) and patients LTFU 50/250 (20%) and 150/680 (22%) is similar between men and women.

Average CD4 count before treatment was 392 (N = 13) in men and 427 (N = 45) in women. During treatment, average CD4 count was 411 (N = 25) in men and 473 (N = 70) women.

The proportion of undetectable viral load was 75.5% and 76.6% respectively in men (N = 143) and women (N = 388) (p = 0.89).

Table A2: ART regimens by gender, 1st line. Libikisi health centre, 2013-2019.

	ABC 3TC EFV	ABC 3TC LPV/r	TDF 3TC EFV	TDF 3TC NVP	TDF 3TC DTG	TDF 3TC EFV	AZT 3TC EFV	AZT 3TC NVP
Male	0	0	148	2	76	0	8	9
Female	2	4	437	6	194	1	4	27

The average length of time on ARV treatment is 58 months for both men and women. Although the 2nd line transition to Dolutegravir is done gradually at this health facility supported by PEPFAR, the proportion of second line treatments is far from what would be expected (1% when we could expect at least 10%).

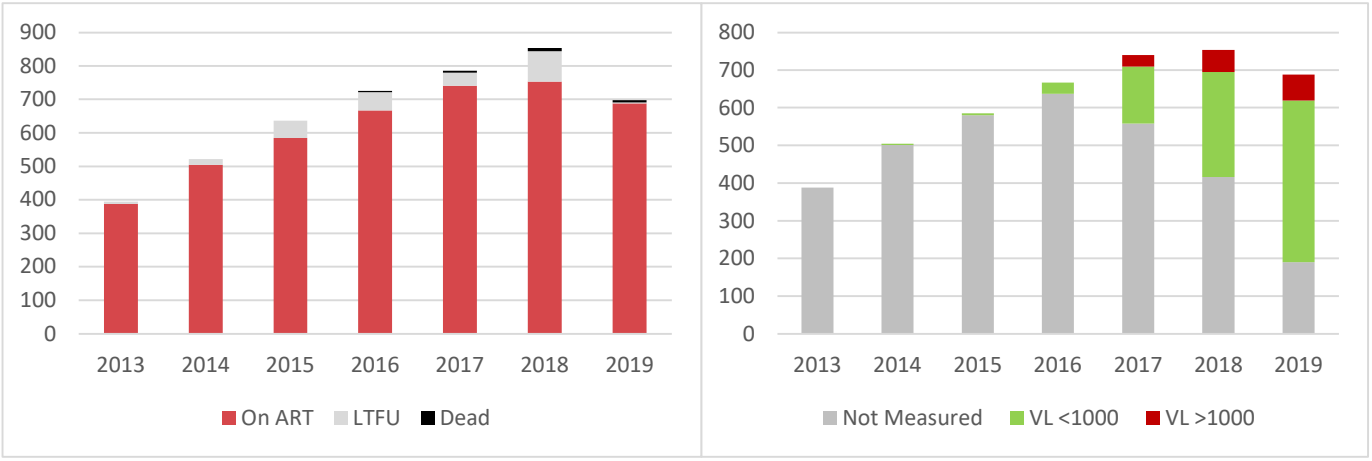
Table A3: ART regimens by gender, 2nd line. Libikisi health centre, 2013-2019.

	AZT 3TC LPV/r	TDF 3TC LPV/r
Male	1	6
Female	2	3

Table A4*:* Main HIV Indicators, Libikisi health centre, 2013-2019.

LIBIKISI		2013	2014	2015	2016	2017	2018	2019*
n. HIV patients followed, men and women (mean age by sex)	Men	113 (51)	140 (49)	172 (48)	197 (48)	204 (48)	203 (47)	190 (47)
	Women	307 (48)	394 (46)	459 (46)	499 (45)	544 (45)	554 (44)	505 (45)
n. PLHIV under antiretroviral drugs (1st and 2nd line regimen)		388 (380+8)	504 (495+9)	585 (576+9)	667 (657+10)	740 (729+11)	753 (742+11)	688 (679+9)
n. new patients under antiretroviral drugs, men and women (mean of age)		129	120	89	103	107	76	46
	Men	36 (50)	30 (49)	26 (43)	27 (48)	28 (39)	21 (40)	17 (44)
	Women	93 (46)	90 (42)	63 (42)	76 (39)	79 (39)	55 (37)	29 (38)
median of CD4 for treated (new)		443 (5)	322 (7)	327 (10)	560 (8)	0	0	0
median of CD4 for treated (old)		512 (13)	428 (8)	459 (130)	458 (80)	477 (89)	475 (88)	466 (82)
median of CD4 for untreated PLHIV		386 (2)	47 (1)	494(4)	0	0	0	0
n. & % Viral Load measured		0	3	5	30 (4.5%)	182 (25%)	337 (45%)	498 (71%)
% VL under 1000 cp/ml		0	3	5	30	151	279	429
n. PLHIV with a 12- and 24-months follow-up	>=12M	276	395	517	580	642	679	616
	>=24 M	227	271	414	508	557	603	572
n. & % lost to follow-up		6 (1.4%)	18 (3.3%)	51 (8.1%)	54 (7.7%)	40 (5.3%)	91 (12%)	3
n. & % deaths among treated and not-treated		0	0	0	4 (0.6%)	5 (0.7%)	9 (1.2%)	6 (0.9%)

*In 2019 data were only available for the first semester.



Left: **Figure A3:** Number of patients on ART, LFTU and dead by year, Libikisi health centre, 2013-2019*.
Right: **Figure A4:** *Number of VL completion and suppression* (when measured) *by year*, *Libikisi health centre, 2013-2019**.

*In 2019 data were only available for the first semester.

The number of PLHIV followed in Libikisi increased from 2013 to 2018, as did the number of PLHIV under treatment, with the exception of second line regimen which did not change. The mean age of new patients decreased slightly.

Viral load data is available from 2017, and the proportion of patients under 1000 cp/ml is over 82%, which is encouraging.

Analysis of survival rates among PLHIV monitored in Libikisi shows the probability of survival among men was 99% (96.4-99.8) at 12 months (N=192), 98% (95.0-99.2) at 24 months (N=175) and 97% (93.4- 98.9) at five years of follow-up (N=105). Among women, it was 99.5% at 12 months (N=544) (98.5-99.8), 99.1% at 24 months (N=474) (97.9-99.6), and 97.2% at five years (N=288) (95.1-98.4), with no statistically significant difference between men and women (as shown in figure A5 below).

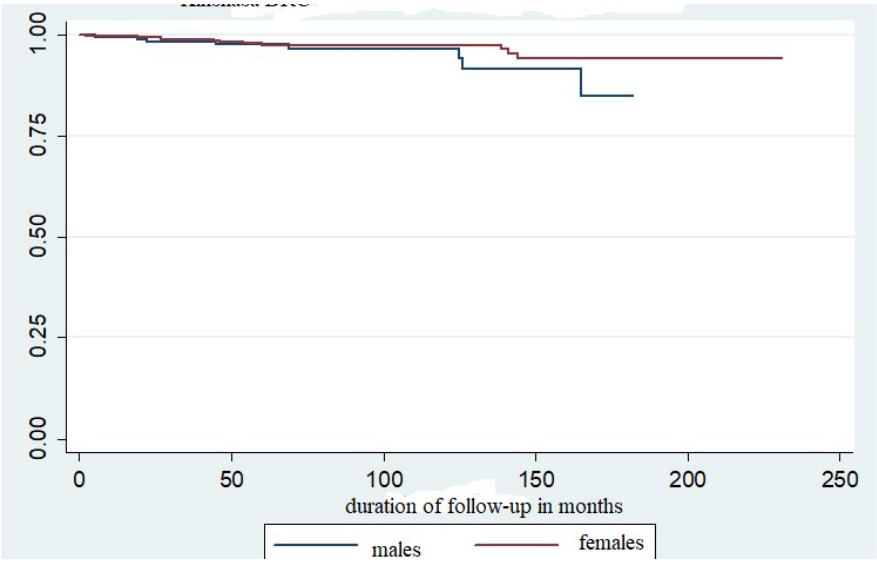


Figure A5: Survival curve by sex, Libikisi Health Centre, 2013-2018. MSF HIV Project, Kinshasa, DRC.

Analysis of retention in care rates among PLHIV monitored in Libikisi shows the probability of retention was 87% (81.9-90.7) at 12 months (N=192), 83.8% (78.3-88.0) at 24 months (N=195) and 79% (72.8-

84.2) at five years of follow-up (N=105) in men, and 88.4% (85.7-90.7) at 12 months (N=544), 83.6% (80.5-86.3) at 24 months (N=474) and 76.5% (72.8-79.8) at five years (N=288) in women, with no statistically significant difference between men and women.

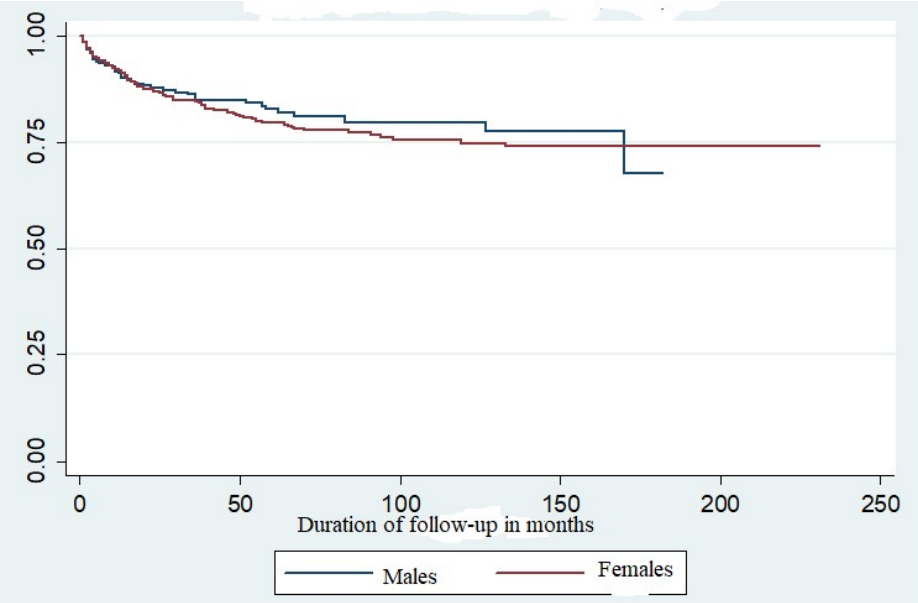


Figure A6: Probability of retention in care, by sex. Libikisi Health Centre, 2013-2019. MSF HIV project, Kinshasa, DRC.

Summary of results and interpretation for LIBIKISI

From 2013 to 2018, the number of PLHIV steadily increased in Libikisi, for women as well as for men. The proportion of 75% women to 25% men is usual in all African cohorts of PLHIV. The number of patients under ARVs also increased, but the proportion of second line regimen stayed very throughout the period.

The number of new patients increased in the two first years and then stayed below 100 patients a year.

The mean age of new patients decreased slightly. It could indicate that PLHIV are seeking treatment earlier, or that the epidemic is progressing more among younger age groups. As CD4 were not measured in new patients, none of these hypotheses could be explored.

The median CD4 for new patients is relatively high at over 300 CD4/mm^3, but stayed under the median of CD4 among treated patients with a longer duration of treatment. This could be interpreted as an indication of good quality of care, although this interpretation may be biased.

The number of measures of VL remains negligible before 2017 (<5% of treated PLHIV) but then increased with a good rate of VL under 1000 cp/ml, over 80%.

Reported mortality is low, and it can be assumed that this data is underestimated and, at least in part, related to LTFU.

Retention in care shows a high probability of retention in men and women – over 75% at five years. However, the data doesn´t enable assessment of trends in quality of care over time. The interviews performed suggest that this could be explained by the well-planned transfer made between MSF and

PATH, and the subsequent takeover by IHAP in 2018. Aware that far too many patients were LTFU, IHAP implemented a more interventionist community strategy better suited to the specific context in Libikisi: 50% of patients are not from the health zone and come from other districts of Kinshasa. As a result, IHAP recruited staff to search for patients who were LTFU after just one month. This criterion was very restrictive operationally, but it facilitated rapid reintroduction of patients back into the system (60% of whom returned).

ELONGA HEALTH CENTRE

Elonga is located in the Masina 2 health zone and received support from MSF between 2013 and 2015. The facility is located in a PEPFAR-supported zone, and the health centre was supervised by EGPAF for 3 years from 2015 to 2018, and subsequently by IHAP. Data is available up until 2019.

A total of 2,137 women (average age 44 years, average monitoring period 52 months) and 967 men (average age 44 years, average monitoring period 39 months) living with HIV were registered. Among the women, 1,227 (57.4%) were monitored, 128 (6%) died and 782 (36.6%) were LTFU. Among the men, 558 (58%) were monitored, 70 (7.2%) died and 339 (35%) were LTFU.

During this period, 1,791 women and 799 men were treated in Elonga. Among the women, 1,195 (66.7%) were monitored, 104 (5.8%) died and 492 (27.5%) were LTFU. Among the men 542 (68%) were monitored, 54 died and 203(25.4%) were LTFU.

The mean CD4 count before treatment was 217 (N=90) for men and 233 (N=207) for women. During treatment, the mean CD4 count was 378 (N=222) for men and 449 (N=664) for women. This shows a good improvement in CD4 count during treatment (p <0.0008).

2,565 (99%) PLHIV were on first line antiretroviral treatment, and 25(1%) on second line, with a similar proportion of men and women on second line treatment (14/1791 (0.8%) versus 11/799 (1.3%) (p = 0.22).

Table A5: ART regimens by gender, 1st line Elonga health centre, 2013-2019.

	ABC 3TC EFV	ABC 3TC LPV	ABC 3TC DTG	D4T 3TC NVP	TDF 3TC EFV	TDF 3TC LPV/r	TDF 3TC Nev	TDF 3TC DTG	AZT 3TC EFV	AZT 3TC LPV/r	AZT 3TC NVP
Male	9	7	4	1	304	-	9	254	25	-	175
Female	2	2	4	1	626	1	14	643	59	2	423

Table A6: ART regimens by gender, 2nd line Elonga health centre, 2013-2019.

	AZT 3TC EFV	AZT 3TC LPV/r	AZT DDI LPV/r	TDF 3TC LPV/r
Male	0	0	1	10
Female	0	0	-	14

The proportion of undetectable viral load was 71.9% among men (290/404) and 73.6% among women (738/1002) (p = 0.50).

The average duration of ARV treatment is 53 months for both men and women.

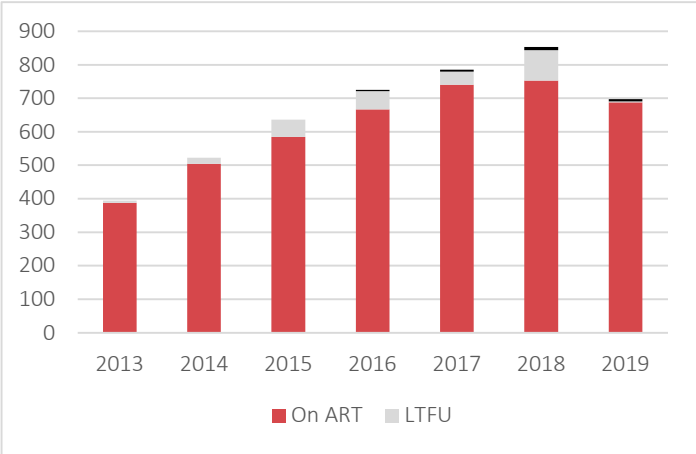
Table A7: Elonga health centre, registered patients from 2013 to 2019, MSF HIV Project, Kinshasa DRC.

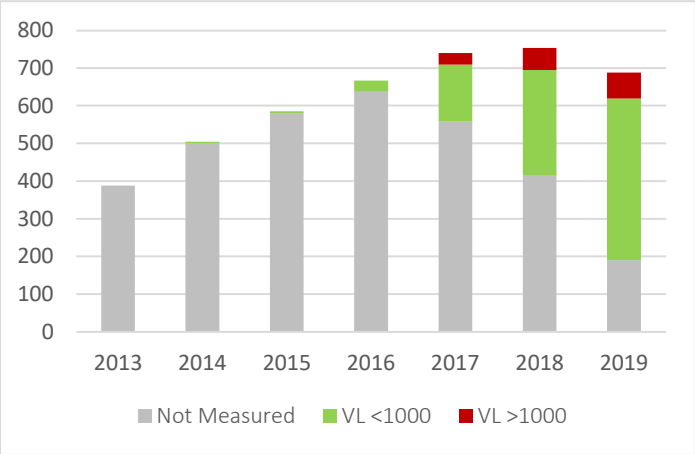
	2013	2014	2015	2016	2017	2018	2019
Patients	1626	1506	1,453	1,530	1,555	1,682	1,747
Died	96 (6%)	68 (4.5%)	69 (4.8%)	90 (5.9%)	87 (5.6%)	57 (3.4%)	30 (1.7%)
LTFU	640 (39%)	470 (31%)	312 (21.5%)	248 (16.2%)	128 (8.2%)	83 (4.9%)	12 (0.7%)

Table A8: Main HIV Indicators, Elonga health centre, 2013-2019.

		2013	2014	2015	2016	2017	2018	2019*
n. HIV patients followed, men and women (mean age by sex)	Men	420 (47)	401 (47)	417 (46)	432 (46)	455 (46)	509 (45)	554 (45)
	Women	1205 (46)	1104 (47)	1035 (47)	1097 (47)	1099 (47)	1172 (47)	1192 (46)
n. PLHIV under ARV drugs (1st and 2nd line regimen)		1359 (1340+19)	1307 (1290+17)	1320 (1303+17)	1432 (1413+19)	1541 (1522+19)	1669 (1650+19)	1725 (1707+18)
n. new patients under ARV drugs, men and women (mean of age)		257	162	175	203	254	267	167
	Men	67 (44)	47 (44)	72 (44)	70 (42)	95 (44)	99 (49)	74 (41)
	Women	190 (43)	115 (44)	103 (42)	133 (42)	159 (41)	168 (42)	93 (39)
median of CD4 for treated (new)		317 (111)	246 (81)	235 (57)	239 (59)	-	-	-
median of CD4 for treated (old)		453 (574)	442 (671)	432 (700)	425 (716)	421 (720)	430 (681)	433 (662)
median of CD4 for untreated PLHIV		24 (429)	15 (292)	211 (9)	-	-	-	-
n. & % VL measured		1	11 (0.8%)	15 (1.1%)	61 (4.2%)	240 (15.6%)	869 (52%)	1308 (75.8%)
% VL under 1000 cp/ml		1	3	9 (60%)	35 (57%)	147 (61.2%)	742 (85.4%)	1131 (86.5%)
n. PLHIV with a 12- and 24-months follow-up	>=12M	1359	1342	1331	1380	1431	1447	1388
	>=24 M	1239	1274	1279	1330	1342	1300	1259
n. & % lost to follow-up		329 (20.2%)	272 (18.1%)	164 (11.3%)	181 (11.8%)	90 (5.8%)	73 (4.3%)	12
n. & % deaths among treated and not-treated		22 (1.6%) 18 (8%)	11 (0.8%) 5 (2.5%)	4 (0.3%) 4 (3%)	15 (1%) 8 (8.2%)	44 (2.9%) 3 (23%)	32 (1.9%) 2 (16.7%)	30 (1.7%) -

*In 2019 data were only available for the first semester.





Left: **Figure A7:** Number of patients on ART, LFTU and dead by year, Elonga health centre, 2013-2019*.
Right: **Figure A8:** Number of VL completion and suppression (when measured) by year, Elonga health centre, 2013-2019*.

*In 2019 data were only available for the first semester.

Analysis of survival rates of PLHIV monitored in Elonga shows a 95.0% (93.2-96.4%) survival probability at 12 months (N=550), 92.4% (90.1-96.4%) at 24 months (N=461), and 89.8% (86.9-92.1) at five years (N=269) for men, and 96.3% (95.3-97.1%) at 12 months (N=1459), 95.1% (94.0-96.1) at 24 months (N=1238) and 93.3% (91.8-94.5) at five years (N=835) for women. This difference in survival rates among women is very statistically significant (p = 0.008) (figure A9 below).

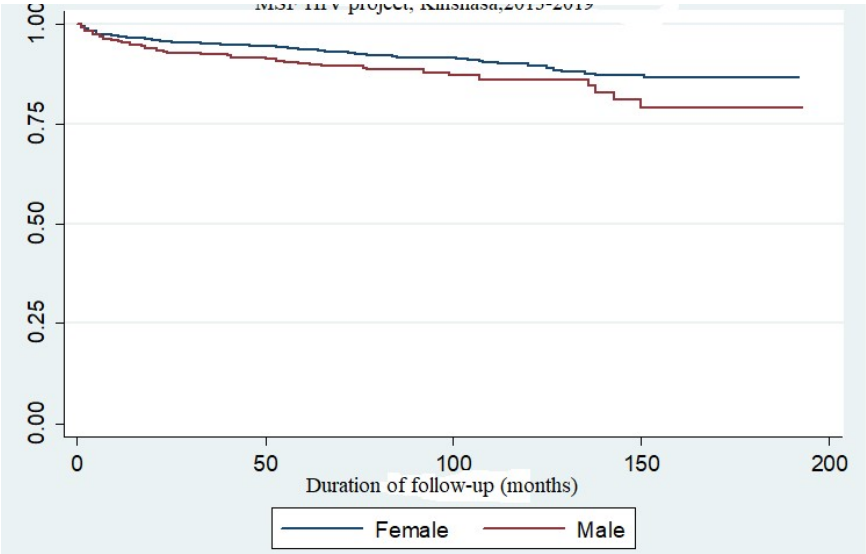


Figure A9: Survival curve by sex, Elonga Health Centre, 2013-2019. MSF HIV Project, Kinshasa, DRC.

Analysis of retention in care rates among PLHIV monitored in Elonga shows a probability of retention of 76% (73-79) at 12 months (N=550), 70% (67-73) at 24 months (N=461) and 60% (57-64) at five years (N=269) for men and 79% (77-80) at 12 months (N=1459), 73% (71-75) at 24 months (N=1238) and 63% (61-66) at five years (N=835) in women, with no statistically significant difference between men and women (p = 0.76, see figure A10 below).

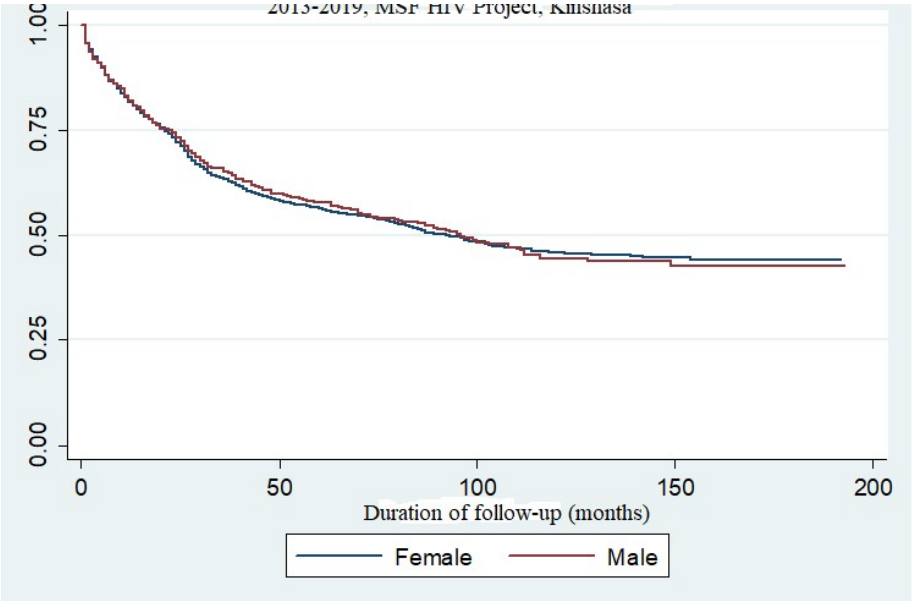


Figure A10*:* Probability of retention in care, by sex, Elonga Health Centre, 2013-2019. MSF HIV Project, Kinshasa, DRC.

Summary of results and interpretation for ELONGA

From 2013 to 2018, the number of PLHIV in Elonga was high (over 1,500) and remained stable, for women as well as for men. The proportion is around 70% women to 30% men. The number of patients under antiretroviral drugs increased from 2016 to 2018, but the proportion of second line regimen stayed very low throughout the period.

The number of new patients decreased in 2014 and 2015, and then steadily increased afterwards to reach around 250 PLHIV in 2017 and 2018.

The mean CD4 for new patients was around and under 300CD4/mm^3. It stayed under the median CD4 among treated patients with a longer duration of treatment.

The number of viral load measurements remained negligible before 2017 (<5% of treated PLHIV), then increased. It reached a good rate of VL under 1000 cp/ml, over 80% only from 2018.

Excluding 2013, reported mortality is low, and it can be assumed that this data is underestimated and, at least in part, related to LTFU.

LTFU in care showed an improvement across the time period from 2013 to 2019, from 20% in 2013 to under 5% in 2018. Such an improvement is surprising, and may reflect an issue with data quality. However, some features of IHAP's approach following MSF's departure described below may, at least in part, explain these results.

The rates of LTFU and death were acceptable among patients monitored at Elonga health centre during the three years of support provided by MSF.

The centre currently has 1,630 registered patients and, according to targets set by PEPFAR, it must register 20 new patients each month. IHAP follows up three times per week and checks the files of new arrivals, the registers and patient care records, viral load results, monitoring of patients LTFU, and

community activities. A monthly incentive of €4,086 is paid, based on the results. The centre refers around 700 patients to the PODI and provides other differentiated models such as adherence clubs, the fast-track channel (from which around 250 patients benefit), and support groups (250 people). Only 600 patients continue to receive care at the centre.

BOLINGO HEALTH CENTRE

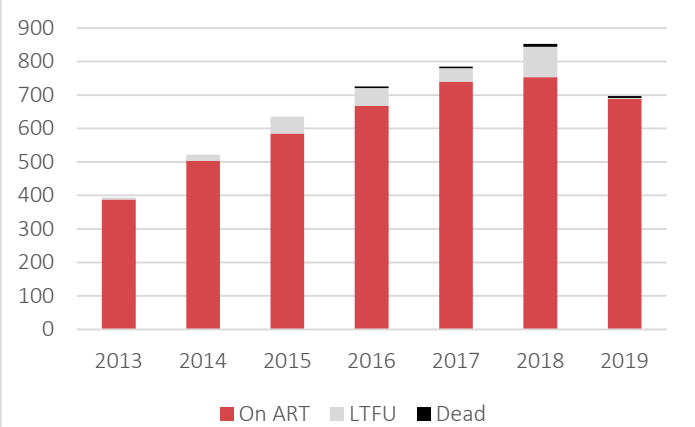
Located in the Masina 1 health zone and part of the BDOM network, Bolingo is a health facility that received MSF support in the first decentralisation phase (until 2009) and then from 2013 to 2015. MSF provided logistical support, trained the teams, and provided tests and medications for opportunistic infections. It is in the PEPFAR-supported zone and was supported by EGPAF until end of September 2019.

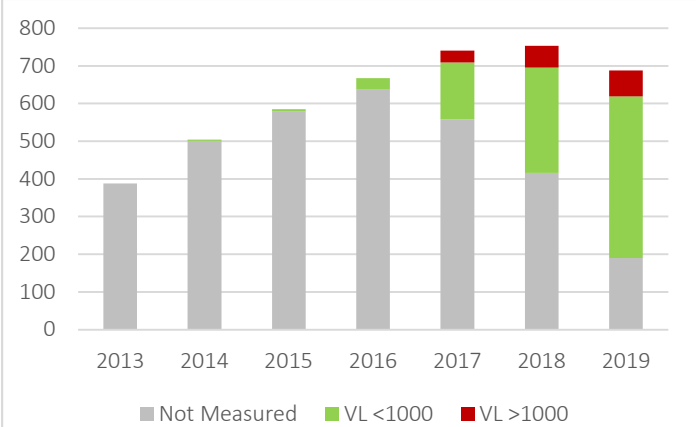
Data regarding the number of registered patients receiving care after MSF's departure are available until 2019.

Table A9: Main HIV Indicators, Bolingo health centre, 2013-2019*.

CS BOLINGO		2013	2014	2015	2016	2017	2018	2019*
n. HIV patients followed, men and women (mean age by sex)	Men	121 (47)	115 (45)	160 (47)	169 (48)	182 (46)	202 (46)	208 (46)
	Women	264 (45)	274 (44)	390 (44)	436 (44)	448 (44)	482 (44)	491 (44)
n.. PLHIV under antiretroviral drugs (1st and 2nd line regimen)		325 (320+5)	361 (355+6)	497 (491+6)	581 (576+5)	617 (612+5)	674 (669+5)	694 (689+5)
n. new patients under antiretroviral drugs, men and women, (mean of age)		95	88	108	115	84	86	47
	Men	27 (43)	27 (47)	31 (48)	31 (46)	26 (38)	30 (37)	21 (45)
	Women	68 (42)	61 (42)	77 (42)	84 (41)	58 (41)	56 (36)	26 (40)
median of CD4 for treated (new)		231 (30)	177 (28)	259 (41)	268 (12)	0	0	0
median of CD4 for treated (old)		212 (79)	237 (95)	260 (238)	271 (281)	271 (284)	270 (277)	270 (271)
median of CD4 for untreated PLHIV		-	-	-	-	-	-	-
n. & % VL measured		1	2	7 (1.4%)	32 (5.5%)	200 (32.4%)	343 (50.9%)	337 (48.6%)
% VL under 1000 cp/ml		1	2	7	30 (93.7%)	184 (92%)	305 (88.9%)	300 (89%)
n. PLHIV with a 12- and 24-months follow-up	>=12M	256	268	431	502	533	586	609
	>=24 M	188	189	322	408	474	516	522
n. & % lost to follow-up		26 (6.7%)	35 (9%)	22 (4%)	24 (4%)	10 (1.9%)	13 (1.9%)	NA
n. & % deaths among treated and not-treated		5 (1.5%) 2 (3.3%)	5 (1.4%) 4(14.3%)	9 (1.8%) 3 (5.7%)	8 (1.4%) 2 (8.3%)	7 (1.1%) 3 (23%)	5 (0.7%) 1 (10%)	3 (0.4%) -

*In 2019 data were only available for the first semester.





Left: **Figure A11:** Number of patients on ART, LFTU and dead by year, Bolingo health centre, 2013-2019*.
Right: **Figure A12:** Number of VL completion and suppression (when measured) by year, Bolingo health centre, 2013-2019*.

*In 2019 data were only available for the first semester.

From 2013 to 2018, the number of PLHIV steadily increased in Bolingo, for both women and men. The proportion is around 70% women to 30% men. The number of patients under antiretroviral drugs increased from 2013 to 2018, but the proportion of second line regimen stayed very low throughout the period.

The number of new patients remained around 100 throughout the period.

The median CD4 for new patients is under 300CD4/mm^3, as well among treated patients with a longer duration of treatment.

The number of VL measurements remained negligible before 2017 (<5% of treated PLHIV), then increased in 2017 but remained under 51%. It reached a good rate of VL under 1000 cp/ml, around 90% from 2017.

The data presents a low mortality rate, and it can be assumed that this data is underdeclared.

LTFU is low throughout the time period from 2013 to 2019, and steadily decreased from 7% in 2013 to under 2% in 2018.

Globally, CD4 number shows no difference between old and new patients, which could be indicative of poor quality of care. However, as less than half of the patients received CD4 count testing, it may be that only those who seemed to deteriorate and needed close follow-up were tested. If this is the case, this result is biased, and thus this interpretation of poor care quality is not valid. To the contrary, the very low mortality and LTFU rates indicate that PLHIV remained at this centre without major problems, perhaps because the cohort was relatively small.

ESENGO HEALTH CENTRE

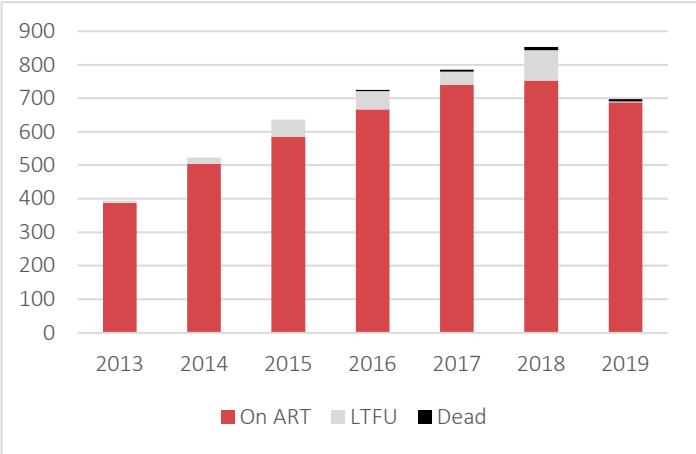
Located in the Masina 1 health zone and part of the Salvation Army network, Esengo is a health facility supported by MSF from 2013 to 2015. MSF provided logistical support, trained the teams, and provided tests and medications for opportunistic infections. It is in the PEPFAR-supported zone and was supported by EGPAF until end of September 2019.

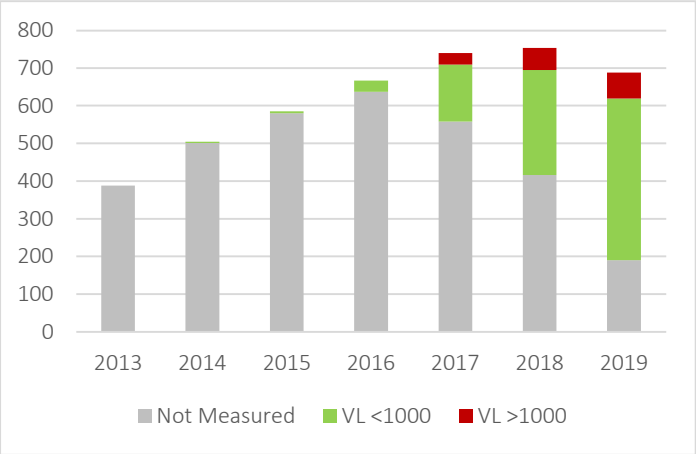
Data regarding the number of registered patients receiving care after MSF's departure are available until 2019.

Table A10: Main HIV Indicators, Esengo health centre, 2013-2019.

CS ESENGO		2013	2014	2015	2016	2017	2018	2019*
n. HIV patients followed, men and women (mean age by sex)	Men	213 (47)	219 (46)	227 (45)	205 (46)	218 (46)	220 (45)	226 (45)
	Women	600 (45)	607 (45)	607 (44)	557 (44)	573 (44)	555 (44)	570 (43)
n. PLHIV under antiretroviral drugs (1st and 2nd line regimen)		768 (14)	619 (606+13)	803 (789+14)	651 (639+12)	718 (706+12)	775 (763+12)	796 (784+12)
n. new patients under antiretroviral drugs, men and women (mean of age)		155	94	92	69	67	109	46
	Men	43 (46)	25 (41)	28 (42)	17 (44)	22 (38)	46 (38)	16 (40)
	Women	112 (46)	69 (41)	64 (40)	52 (40)	45 (37)	63 (36)	30 (38)
median of CD4 for treated (new)		170 (16)	294 (13)	354 (37)	304 (19)	-	-	-
median of CD4 for treated (old)		354 (42)	428 (126)	478 (510)	467 (507)	452 (523)	466 (493)	466 (479)
median of CD4 for untreated PLHIV		487 (20)	27 (5)	651.5 (2)	-	-	-	-
n. & % VL measured		1	7	31 (3.9%)	56 (8.6%)	170 (23.7%)	237 (30.6%)	226 (28.4%)
% VL under 1000 cp/ml		1	5	25 (80.6%)	50 (89.3%)	164 (96.5%)	225 (94.9%)	214 (94.7%)
n. PLHIV with a 12- and 24-months follow-up	>=12M	433	562	551	567	641	668	691
	>=24 M	354	413	476	497	585	608	612
n. & % lost to follow-up		78 (9.6%)	73 (8.8%)	60 (7.2%)	1 (0.1%)	30 (3.8%)	10 (1.3%)	0
n. & % deaths among treated and not-treated		7 (0.9%) 5 (11.1%)	12 (1.9%) 5 (2.4%)	11 (1.4%) 5 (16.1%)	5 (0.8%) 1 (0.9%)	16 (2.2%)	15 (1.9%)	0

*In 2019 data were only available for the first semester.





Left: **Figure A13:** Number of patients on ART, LFTU and dead by year, Esengo health centre, 2013-2019*.
Right: **Figure A14***: Number of VL completion and suppression (when measured) by year, Esengo health centre, 2013-2019**.

*In 2019 data were only available for the first semester.

Between 2013 and 2018, the number of PLHIV in Esengo varied from year to year, especially for those receiving treatment. In 2013 there were 768 being treated; the number decreased to 619 in 2014, 803 in 2015, and 651 in 2016, increasing only as of 2017. The reliability of the database may therefore be called into question; the evaluation did not identify any specific features of the centre's history which may explain these time-related changes.

The proportion is around 70% women to 30% men. The proportion of patients on second line regimen remained very low throughout the period.

The number of new patients also changed throughout the years, from 155 in 2013 to 67 in 2017, finally increasing to 109.

The median of CD4 for new patients is usually below 300CD4/mm^3, lower than the median among patients with a longer duration of treatment.

The number of viral load measurements remained negligible in 2013, 2014 and 2015 (<5% of treated PLHIV), then increased from 2016 but remained under 31% until 2019. It reached a good rate of VL under 1000 cp/ml, over 90% from 2017.

The data present a low mortality rate, and LTFU was also low from 2013 to 2019, steadily decreasing from 9.6% in 2013 to under 2% in 2018.

BOMOTO HEALTH CENTRE

Located in the Kalamu 1 health zone, Bomoto is a health facility supported by MSF from 2013 to 2015. MSF provided logistical support (purchase of an incinerator and cleaning products), trained the teams (doctors, nurses, maintenance staff for hygiene purposes), medication for opportunistic infections, nutritional supplements, $20 a month to purchase fuel to collect ARVs from the Health Zone Office, and incentives of approximately $ 500. It is located in the GF-supported zone and is now supported by BDOM. Data regarding the number of registered patients receiving care after MSF's departure is not available.

A total of 524 women (average age 44 years, average follow-up period 47 months) and 216 men (average age 46.5 years, average follow-up period 44 months) living with HIV were registered in Bomoto. Among the women, 332 (63.4%) were monitored, 21 (4%) died and 171 (32.6%) were lost to follow-up. Among the men, 127 (58.8%) were monitored, 9 (4.2%) died and 80 (37%) were lost to follow-up.

During this period (2013-2015), 452 women and 176 men were treated in Bomoto. Among those monitored (67%), 4 (2.3%) died and 54 (30.7%) were lost to follow-up.

Average CD4 count before treatment for men was 208 (N=155) and 232 (N=389) for women. During treatment, the average was 422 (N=123) for men and 488 (N=419) for women. This shows an important improvement in CD4 count during treatment.

595 (80%) PLHIV were put on first line antiretroviral treatment and 34 (4.6%) on second line, with a higher proportion of women receiving second line treatment (27/455 - 6%) than men (7/174 - 4%), p = 0.013)

The proportion of undetectable viral load was 43% and 55.5% respectively in men (N = 7) and women (N = 9).

Table A11: ART regimens by gender, 1st line, Bomoto health centre, 2013-2015.

	ABC 3TC EFV	ABC 3TC LPV/r	ABC 3TC NVP	TDF DDI LPV/r	TDF DDI Nev	TDF 3TC EFV	TDF 3TC NVP	AZT 3TC EFV	AZT 3TC NVP
Male	2	0	0	0	0	31	2	9	125
Female	3	4	3	1	1	69	23	22	302

Table A12: ART regimens by gender, 2nd line, Bomoto health centre, 2013-2015.

	AZT 3TC EFV	AZT 3TC LPV/r	TDF DDI LPV/r	TDF 3TC LPV/r	AZT 3TC LPV/r
Male	0	0	3	3	1
Female	2	1	5	11	8

The average length of time on ART is 53 months for both men and women.

Table A13: HIV registered patients and main results, Bomoto Health centre, 2013 to 2015, MSF HIV Project, Kinshasa DRC.

	2013	2014	2015
Patients	632	601	508
Died	11 (2%)	11 (2%)	8 (2%)
LTFU	67 (11%)	128 (21%)	56 (11%)

Among the patients monitored in Bomoto health centre during the three years of MSF support, the mortality rate (2%) was low and the rate of LTFU remained acceptable.

Analysis of survival rates among PLHIV monitored in Bomoto shows the probability of survival was 98.1% (94.3-99.4%) at 12 months (N=138), 98.1% (94.3-99.4 %) at 24 months (N=124) and remains the same after five years of monitoring (N=56) among men and 97.05% (N=379) (94.9%-98.3%), 96.5% (N=329) (94.2-98.0) and 95, 1% (N=149) (92.3-96.9) and among women, with no statistically significant difference between men and women (see figure A15 below).

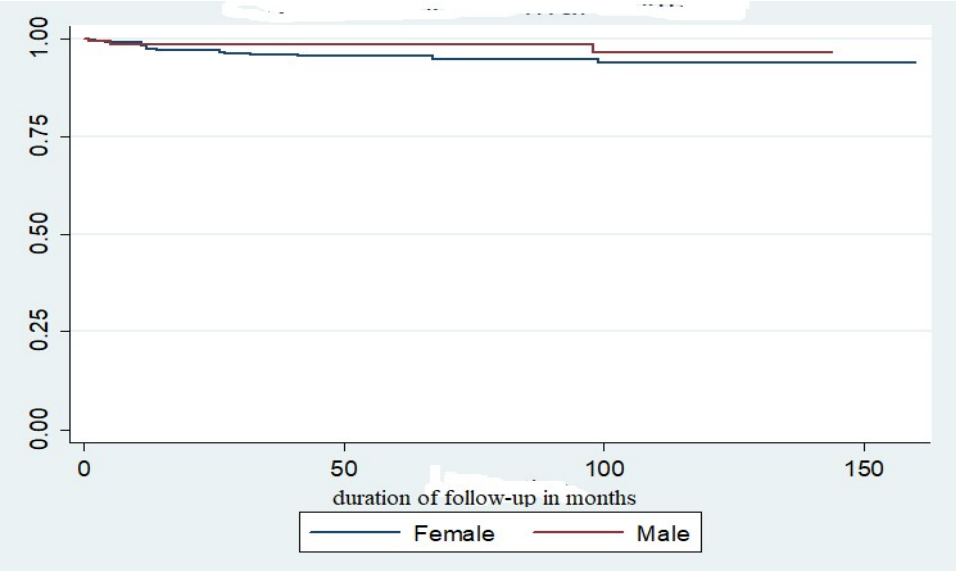


Figure A15: Survival curve by sex, Bomoto Health Centre, 2013-2015. MSF HIV Project, Kinshasa, DRC.

Analysis of retention in care rates among PLHIV monitored in Bomoto shows a probability of 92.6% (89.7-94.7) at 12 months (N=138), 87.2% (83.7-90.1) at 24 months (N=124) and 75% (70.5 –79.4) at five years (N=56) for men and 88.9% (83.1-92.8) at 12 months (N=379), 85.9% (78.4-89.6) at 24 months (N=329) and 68.9% (59.7-76.3) at 5 years (N=149) for women, with no statistically significant difference between men and women (p = 0.77, see figure A16 below).

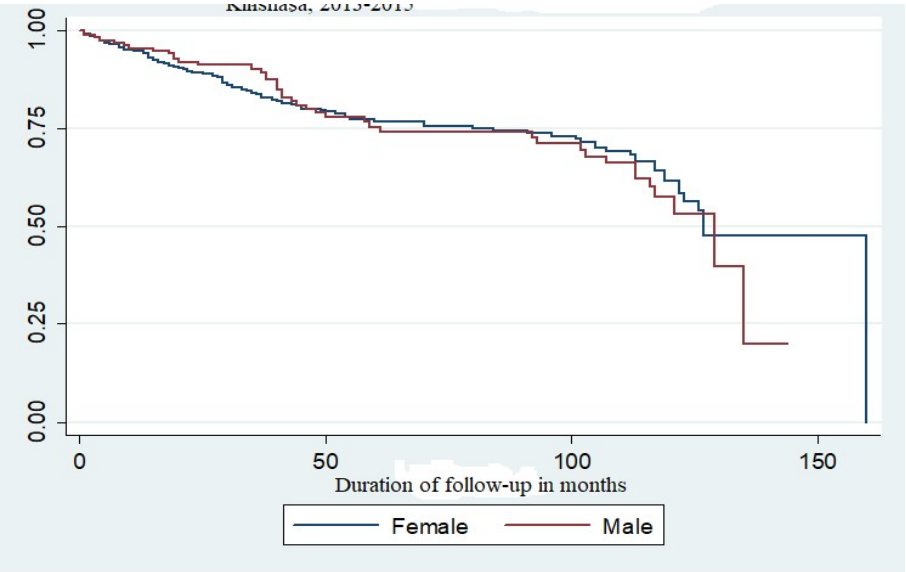


Figure A16: Probability of retention in care, Bomoto Health Centre, 2013-2015. MSF HIV Project, Kinshasa, DRC.

An interview with the lead doctor at the health centre revealed that there are currently 943 patients registered. This large number is related to the closure of an outpatient treatment centre previously supported by AMOCONGO. MSF's withdrawal from this centre took place in a hasty manner, without preparing the medical team and counsellors. Currently, 24 patients monitored at the centre receive their medication at PODI Ouest, a figure that the director would like to see increase. However, many patients refuse and prefer to continue to go to the health centre.

Summary of results and interpretation for Bomoto

In Bomoto, data is only available for the period of MSF's support, except the figures for the last year provided by the director.

During the period of MSF support, mortality was low. At the contrary, LTFU was high, with 17% at 24 months. According to the director of the Bomoto centre, staff members became fatigued in the face of recurrent challenges (stock-outs (though they have reduced in frequency since the introduction of Dolutegravir), lack of drugs to treat opportunistic infections, lack of incentives), which may explain the increase in patients LTFU.

BOYAMBI HEALTH CENTRE

Boyambi is a health facility located in the Barumbu health zone, and was supported by MSF from 2013 to 2015. This facility is currently part of the GF-supported Kinshasa area and is managed by the Salvation Army. No cohort data after MSF's departure is available.

A total of 843 women (mean age 45.4 years, mean follow-up period 60.1 months) and 297 men (mean age 46.2 years, mean follow-up period 57.4 months) living with HIV were registered in Boyambi from 2013 to 2015. Among the women, 497 (59%) were monitored, 17 (2%) died and 329 (39%) were LTFU. Among the men, 154 (52%) were monitored, 8 (2.7%) died and 135 (45%) were LTFU.

During this period, 772 women and 279 men were treated in Boyambi. Among the women, 493 (63.8%) were monitored, 15 (1.9%) died and 264 (34.2%) were LTFU. Among the men 154 (55.2%) were monitored, 7 (2.5%) died and 118 (42.3%) were LTFU.

Average CD4 count before treatment was 223 (N=208) for men and 223 (N=626) for women. During treatment, the average CD4 count was 303 (N=252) for men and 475 (N=709) for women. The difference between men and women in the most recent CD4 counts is very significant (p=0.001). There was an important improvement in CD4 counts during treatment.

There were 1,028 (97.8%) PLHIV on first line antiretroviral treatment and 23 (2.2%) on second line, with a similar proportion of men and women on second line treatment (18/772 (2.3%) compared to 5/279 (1.8%), (p = 0.81).

Table A14: ART regimens by gender, 1st line, Boyambi health centre, 2013-2015.

	ABC 3TC LPV/r	ABC 3TC NVP	TDF 3TC Nev	TDF 3TC EFV	TDF 3TC LPV/r	AZT 3TC NVP	AZT 3TC EFV
Male	1	0	3	30	1	217	22
Female	0	5	15	64	0	618	51

Table A15: ART regimens by gender, 2nd line, Boyambi health centre, 2013-2015.

	ABC 3TC EFV	ABC 3TC LPV/r	ABC DDI LPV/r	TDF 3TC LPV/r	AZT 3TC LPV/r
Male	0	1	0	2	2
Female	1	1	4	8	4

The proportion of undetectable VL was 45.4% in men (10/22) and 57.9% in women (33/57), which is not statistically different.

Table A16: HIV registered patients and main results, Boyambi health centre, 2013 to 2015, MSF HIV Project, Kinshasa DRC.

	2013	2014	2015
Patients	939	968	688
Died	19 (2%)	17 (1.8%)	7 (1%)
LTFU	349 (37%)	327 (34%)	55 (8%)

MSF ceased supporting this centre at the end of the second quarter of 2015. The figures for 2015 are therefore incomplete. Among the patients registered at the Boyambi health centre during the three years of MSF support, the mortality rate was very low, while the rate of LTFU was very high.

Analysis of survival rates among PLHIV monitored in Boyambi shows that the probability of survival was 99.6% (97.2-99.9%) at 12 months (N=230), 99.1% (96.6-99.8 %) at 24 months (N=190) and 98.4% (94.9-99.5) at five years (N=72) in men, and 99.5% (98.7-99.9%) at 12 months (N=631), 99.1% (98 , 0-99.6) at 24 months (N=532) and 97.5% (95.5-98.6) at the five years (N=237) in women, with no statistically significant difference between men and women

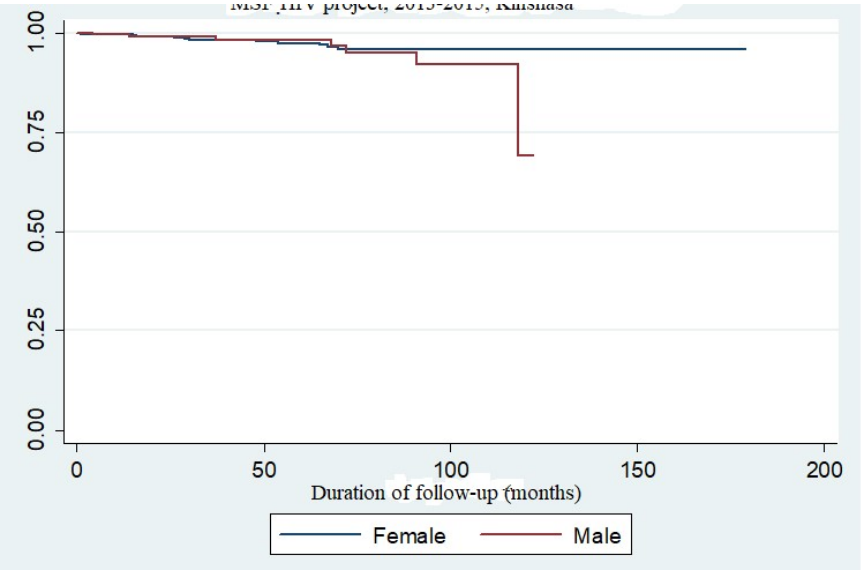


Figure A17: Survival curve by sex, Boyambi Health Centre, 2013-2015. MSF HIV Project, Kinshasa, DRC.

Analysis of retention in care rates among PLHIV monitored in Boyambi shows that the probability of retention was 89.9% (85.6-93.0) at 12 months (N=230), 82.0% (76.7-86, 2) at 24 months (N=190) and 60.8% (53.4 –67.4) at five years (N=72) for men and 90.1% (87.7- 92.0) at 12 months (N=631), 82.8% (79 , 8-85.4) at 24 months (N=532) and 67.7% (63.5 –71.5) in women after five years (N=237). The higher rate of retention among women is statistically significant (p = 0.0068) (figure A18 below).

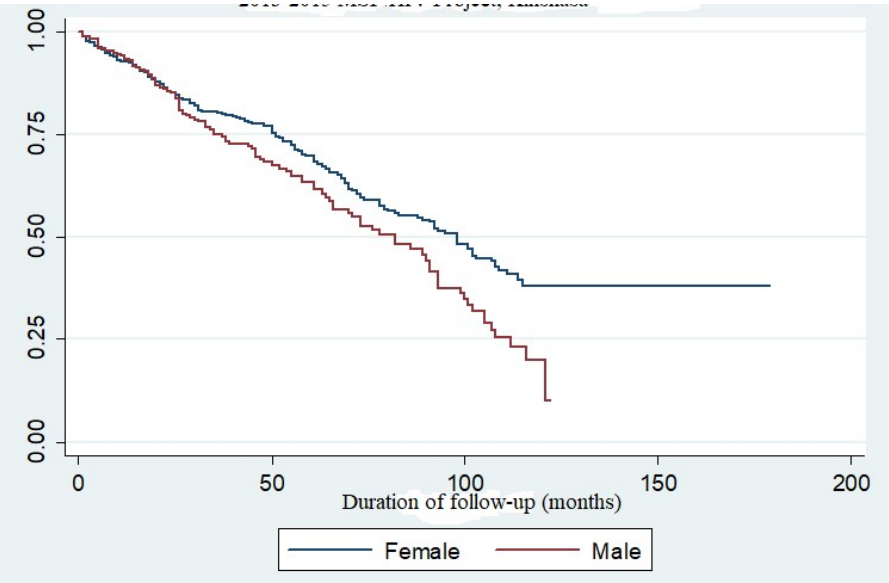


Figure A18: Probability of retention in care, by sex, Boyambi Health Centre, 2013-2015. MSF HIV Project, Kinshasa, DRC.

Summary of results and interpretation for Boyambi

In Boyambi, data is only available for the period of MSF support. During this period, mortality was low. However, LTFU was very high, at over 30% in 2013 and 2014, likely including undeclared deaths. Evaluators could not explain why retention in care continued to decrease over time, contrary to what is expected and that which was observed in other centres.

KITAMBO GENERAL REFERRAL HOSPITAL

Located in the Kitambo health zone, this hospital was supported by MSF during two periods: from 2005 to 2008, and from 2013 to 2015. They were over 30 doctors at this site during the period of MSF's intervention, but they were not present on a daily basis, which complicated engagement with this hospital. We were unable to obtain data on a cohort of outpatients; we only obtained a summary of the activity of hospitalised patients and the number of PLHIV who were registered there over the years.

From 2014 to 2016, there were respectively 393, 381 and 264 hospitalised patients. The mortality rate remained above 20% during these three years (29%, 22% and 23%), with a mortality rate during the first 48 hours of between 8 and 11%.

In summary, although this hospital is important within Kinshasa's health system of Kinshasa, it was of little interest for the decentralisation process of MSF's HIV project. During the three years, the number of hospitalized PLHIV decreased, and the mortality remained over 20% without any apparent improvement.

ROI BAUDOUIN 1ER GENERAL HOSPITAL

Hôpital Roi Baudouin (HRB), located at Masina 1 HZ, was supported by MSF from 2013 to 2018. It is now supervised by ICAP, a PEPFAR technical partner.

Between 2014 and 2018, the mortality rate remained above 20%, with a slight decrease in 2019 (25%, 20%, 20%, 23% and 17%) and a mortality rate during the first 48 hours of between 6 and 10%. However, there was a decrease in the number of deaths, including deaths in the first 24 hours. It was not possible to identify the effect of care provider experience or any potential decrease in patients' immunodeficiency.

Table A17: Inpatients and numbers of deaths, Roi Baudouin GH, 2014 to 2018, MSF HIV Project, Kinshasa DRC.

	2014	2015	2016	2017	2018
Inpatients	456	639	462	374	332
Deaths	113 (25%)	127 (20%)	91 (20%)	88 (23%)	57 (17%)
Deaths <48H	46 (10%)	40 (6.2)	41 (8.9%)	25 (6.7%)	23 (6.9%)

There were 1,860 PLHIV patients seen on an outpatient basis, including 1,854 who were monitored between 2013 and 2017. Among them, 1,206 were women (average age: 36.6 years), of whom 617 (51%) were on first line antiretroviral treatment, 51 on second line treatment (4.2%), and 538 (45%) were not on treatment. There were 654 men (mean age 38.5 years), of whom 289 (44%) were on first line antiretroviral therapy, 27 on second line (4%), and 338 (52%) were not on treatment.

The gender ratio was 0.35 in the cohort and 0.32 in PLHIV treated. This proportion of men to women is consistent with most places on the African continent in cohorts of monitored PLHIV.

Table A18: HIV outpatients and main results, Hôpital Roi Baudouin (HRB), outpatients service register 2013 to 2017, MSF HIV project, Kinshasa DRC.

	2013	2014	2015	2016	2017
Outpatients	315	390	510	607	644
Deaths	35 (11)	40 (10%)	68 (13%)	47 (8%)	30 (5%)
LTFU	131 (42%)	151 (39%)	156 (31%)	179 (29%)	152 (24%)

Among the patients monitored on an outpatient basis at RBH during the five years of MSF support, there was an improvement in the reported mortality rate (from 11% to 5%) and in the numbers LTFU, although it remained very high throughout the period. MSF left RBH in June 2018; it is too early to acquire data for the period following MSF's departure for comparison.

Of the viral load tests performed from 2013 to 2017, the proportion of undetectable viral load was 64% in men (N=202) and 69% in women (N = 432) (p=0.25), which is lower than expected in adults in Africa (usually over 80%).

Table A19: ART regimens by gender, 1st. line, Hospital Roi Baudouin, 2013-2019.

	ABC 3TC EFV	ABC 3TC NVP	ABC 3TC LPV/r	TDF 3TC EFV	TDF 3TC NVP	TDF 3TC LPV/r	AZT 3TC EFV	AZT 3TC NVP	AZT 3TC LPV/r
Male	6	2	1	186	0	1	30	59	1
Female	8	1	0	479	3	0	35	91	0

Table A20: ART regimens by gender, 2nd line, Hospital Roi Baudouin, 2013-2019.

	ABC 3TC LPV/r	TDF 3TC EFV	TDF 3TC LPV/r	AZT 3TC LPV/r
Male	3	0	16	8
Female	4	1	29	17

In this hospital, 8% of PLHIV were on second line treatment, which is an expected proportion. Since the RBH support ended in June 2018, there were no patients on Dolutegravir at the time.

Among women, the probability of survival was 92% at 12 months (N=418), 91% at 24 months (N=302) and 84% at five years (N=99). In men, it was 89% (N=139), 85% (N=135) and 78% (N=38) respectively, with no statistically significant difference (log-rank test p = 0.19).

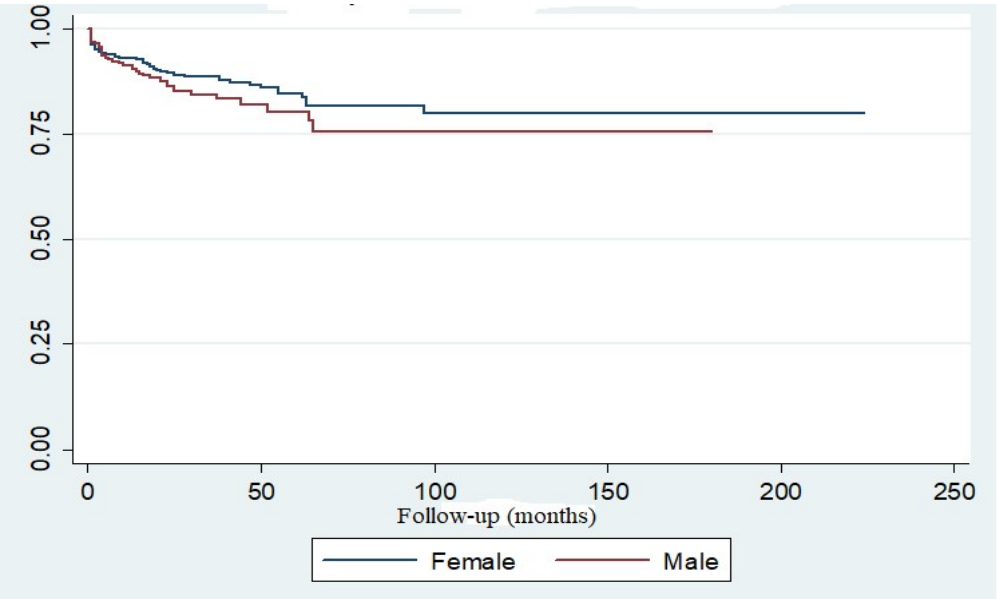


Figure A19: Survival curve by sex, Roi Baudouin GH, 2013-2018. MSF HIV Project, Kinshasa, DRC.

Among women, the probability of retention was 73% at 12 months (N=418), 65% at 24 months (N=302) and 51% at five years (N=99). In men, it was respectively 68% (N=193), 61% (N=135) and 47% (N=38), with no statistically significant difference (log-rank test p = 0.19).

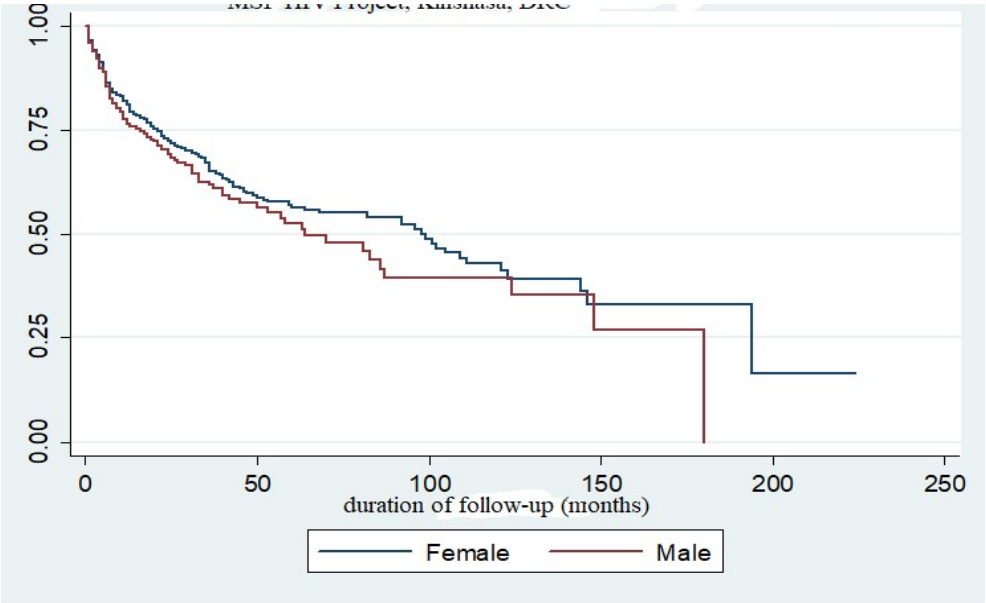


Figure A20: Probability of retention in care, Roi Baudouin GH, 2013-2018. MSF HIV Project, Kinshasa, DRC.

Among the outpatients at Hôpital Roi Baudouin, the mortality rate was high during the first year and then stabilised. However, the number of patients LTFU was very high and persists over the years.

Summary of results and interpretation for Hôpital Roi Baudouin

Among the outpatients at Hôpital Roi Baudouin, the mortality rate was high during the first year and then stabilised, which indicates a good level of care. However, the number of patients LTFU was very

high and persisted over the years. From these data, it is plausible to assume that deaths have been underestimated and that some of the deceased patients are included in the patients LTFU.

The handover from MSF to PEPFAR took at least one year, but it was performed under good conditions and the level of care was maintained following MSF's departure, with the exception of laboratory availability. However, data from after 2019 must be analysed to draw further conclusions.

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As a global conclusion for all sites from 2013 to 2015, the number of patients followed increased gradually, as did the proportion of patients under treatment in centres where such information is available. The proportion of those under second line therapy remained very low. The proportion by gender remained at a stable 70/30 ratio. Viral load was not widely measured, but CD4 remained over 300. The rates of LTFU and death were acceptable among patients monitored at Elonga health centre. Reported mortality appears relatively low in other health centres where such information is available, but this may be a consequence of the fairly high rate of LTFU (more than 17% at 24 months in Bomoto and Boyambi, for example). Hospital Roi Baudouin outpatients stands out with a fairly high mortality rate rate during the first year of MSF support.

Although important within Kinshasa's health system, the Kitambo hospital was of little interest for the decentralisation process of MSF's HIV project. During the three-year period of MSF support, the number of hospitalized PLHIV decreased, and mortality remained over 20% without any apparent improvement.