

## TRIANGULATING OVC AND HEALTH FACILITY DATA TO

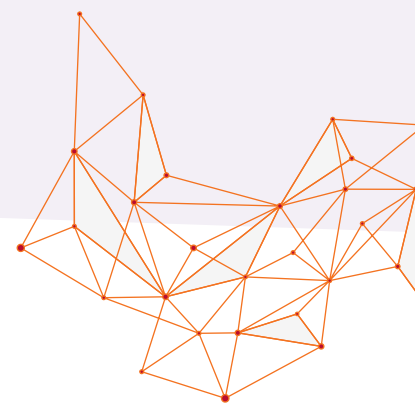
# Identify Gaps in HIV Care and Treatment for Children and Adolescents Living with HIV



## BACKGROUND

COVida – Juntos Pelas Crianças (2016–2022), is a USAID/PEPFAR-funded project implemented in high HIV-burden districts in Mozambique by FHI 360, in partnership with CARE and a cohort of local implementing partners. The project aims to improve the health, nutritional status, and well-being of orphans and vulnerable children (OVC). As a PEPFAR/USAID-funded project, one of COVida's priorities is to ensure that children and adolescents living with HIV (C&ALHIV) adhere to treatment and achieve viral suppression. This is an important priority in Mozambique because the rate of viral load (VL) suppression in children and adolescents (0–19 years) was only 53% at the end of FY19 compared to 81% amongst adults (Mozambique PEPFAR COP20).

According to PEPFAR guidance, OVC programs and PEPFAR HIV clinical partners in health facilities (HFs) need to work hand in hand to improve pediatric HIV treatment outcomes for C&ALHIV under the age of 18 years. However, COVida program implementation experience has shown that sometimes there are data-related challenges that can hinder this collaboration. For instance, due to fear of stigma and discrimination C&ALHIV sometimes register under different names in the OVC program and the HFs. This can complicate coordination and collaboration efforts between the OVC program and antiretroviral therapy (ART) providers. Lack of correct data on a child's treatment status can also prevent the OVC program from providing appropriate support at the community and household levels. To identify and address these and other data-related challenges and improve pediatric retention and viral suppression rates amongst C&ALHIV, COVida undertook an exercise to triangulate COVida OVC program data with HF data in the province of Inhambane, where COVida project activities are led by CARE.



## INTERVENTION

The data triangulation exercise consisted of comparing data on C&ALHIV under 18 from COVida's community case management information system with HF data on children on ART to identify discrepancies and take corrective actions. This exercise was conducted from October to December 2019 in the province of Inhambane (led by CARE) in collaboration with the Elizabeth Glaser Pediatric AIDS Foundation (EGPAF), who is the PEPFAR HIV clinical partner in this province. The exercise was conducted in 14 EGPAF-supported HFs in the following five districts: **Zavala, Maxixe, Morrumbene, Massinga,** and **Vilankulo.**

## ACTIVITIES

The data triangulation exercise included the following key activities:

- COVida held a meeting with EGPAF and its local implementing partners in each district to discuss and coordinate on the data triangulation exercise in specific HFs in Inhambane.
- COVida presented its tool to track retention and adherence amongst C&ALHIV to EGPAF and the tool was jointly adjusted to include new fields typically captured by the HFs'

electronic patient tracking system [EPTS]: Each COVida local implementing partner generated a list of names and patient identification numbers of C&ALHIV enrolled in the OVC program and shared this list with the EGPAF-supported HFs in the OVC program's target areas.

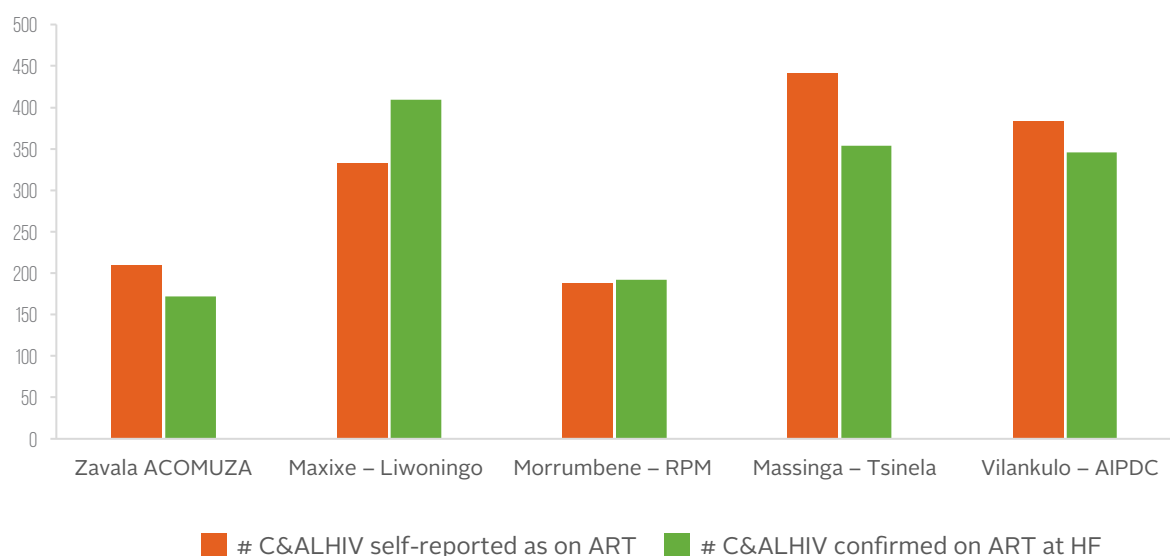
- Health facility HIV clinical staff cross-checked the COVida data for each child (e.g., names, treatment status) with the data in the EPTS.
- Health facility HIV clinical staff provided feedback to COVida's local implementing partners on the discrepancies identified. These were investigated by both COVida and EGPAF.
- COVida, its local implementing partners, and EGPAF held additional meetings to update and clarify information in both partners' forms and databases.

The main challenge faced by COVida during the data triangulation exercise was that some HFs did not have updated data in the EPTS. To address this issue HF staff obtained updated information directly from patients during clinical appointments and/or from pharmacy records. Although this process was slow, it helped provide the most recent information on the treatment and VL status of C&ALHIV.

## RESULTS

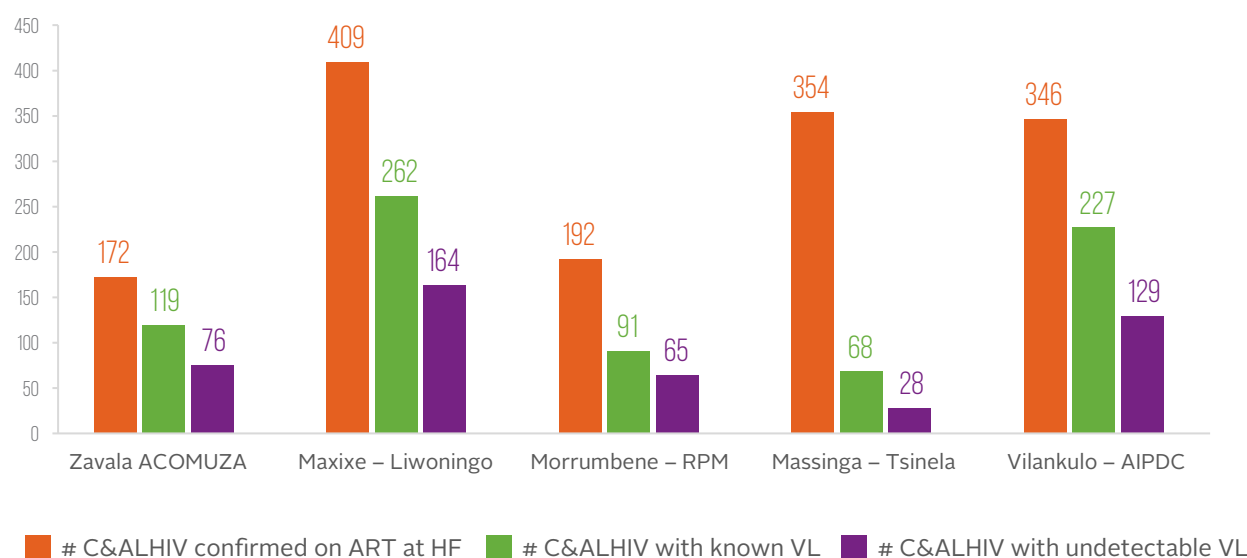
There were considerable discrepancies between the HF and the COVida program data. The total number of COVida beneficiaries who self-reported being on ART was 1,555 as of October 19, whereas only 1,473 were confirmed to be in treatment by HFs. The graph below shows the discrepancy in COVida and HF data on the number of C&ALHIV on ART by district.

**C&ALHIV Self-reported as on ART vs. Confirmed on ART at Health Facilities**



The results also helped COVida confirm gaps in treatment adherence and VL testing. Amongst the C&ALHIV whom COVida confirmed to be on treatment in HFs in Inhambane (1,473), only 767 (52%) had VL data, and of those, only 462 (60%) were virally suppressed. The graph below shows the VL cascade for each district.

### C&ALHIV's Viral Load Status – Inhambane



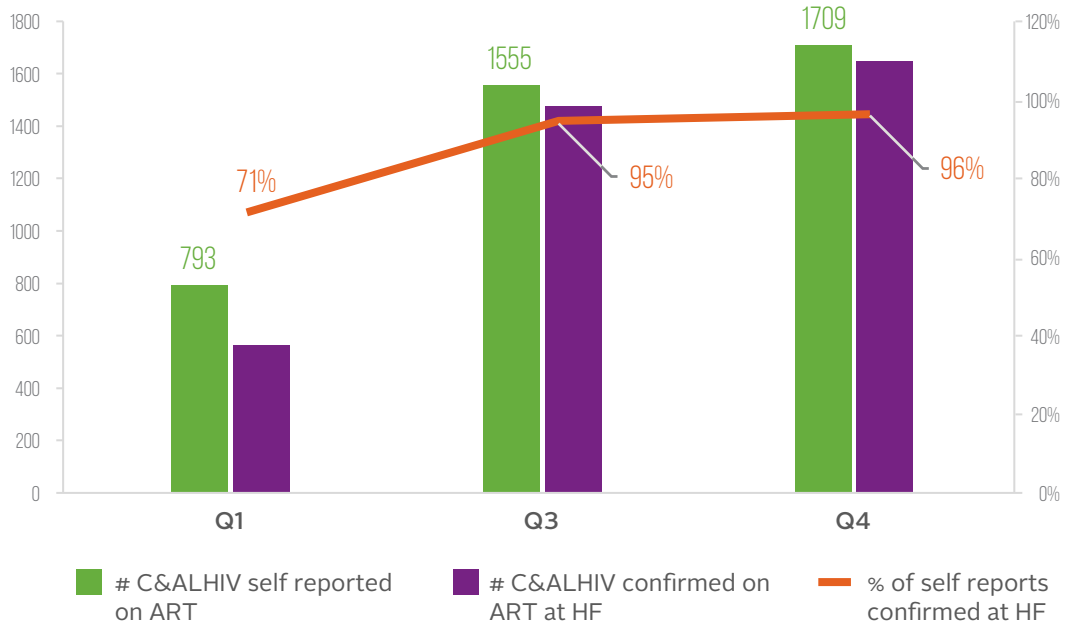
The table below explains the findings in more detail and describes the corrective and improvement measures taken by COVida. It is important to note that there are gaps in the VL testing system in Mozambique that are out of the control of the OVC project, such as:

- HF do not necessarily offer VL testing services to everyone; patients have to request it.
- VL samples are sent to another province, and it can take up to 3 months for a HF to receive the results.
- VL test results are sent to HFs only with the code that helps identify the patients, but not with the HF ID.
- VL test results are sometimes not properly filed in the patient's folder.

Findings	Corrective/Improvement Actions Taken by COVida
Some C&ALHIV were not registered as ART patients in any of the HFs in Inhambane, suggesting that they had registered in an HF using a different name.	<ul style="list-style-type: none"> <li>• Community case workers and their supervisors reviewed names in the OVC program's case management records, cross-checking with names on patient treatment cards, and then communicated findings to the HFs.</li> </ul>
There were discrepancies in the ages of children in the COVida and the HF databases. Some HIV-positive children were registered as adults in the HFs' database.	<ul style="list-style-type: none"> <li>• Community case workers and their supervisors cross-checked children's age with their birth certificates and shared the correct information with the HF/EGPAF data entry specialist. COVida's case management records were also corrected as needed.</li> </ul>
Some C&ALHIV who reported to COVida that they were being adherent, were registered as being lost to follow-up (LTFU) in the HFs.	<ul style="list-style-type: none"> <li>• Community case management cadres were provided with lists of children LTFU, and they were able to find the children and bring them back to the HFs for treatment re-initiation.</li> </ul>
Some C&ALHIV registered by COVida as not being on ART were actually on ART in a different HF (to which they had transferred themselves).	<ul style="list-style-type: none"> <li>• COVida updated its case management records to register the name of the new HF.</li> </ul>
Only a small number of C&ALHIV had VL data.	<ul style="list-style-type: none"> <li>• COVida trained community case workers to educate caregivers on VL testing, and to encourage them to request this service in the HF. It is hoped that increasing demand will lead to improvements in the VL testing system.</li> <li>• COVida started collecting VL data in HFs (with EGPAF's support) to track children's VL.</li> </ul>
Only a small number of children were virally suppressed.	<ul style="list-style-type: none"> <li>• COVida trained community case workers on ART adherence to improve monitoring of ART adherence and adherence counseling in the OVC program.</li> <li>• Strengthened messaging on ART adherence for children and caregivers during home visits.</li> </ul>

As a result of the data triangulation exercise, COVida was able to generate a more accurate picture of C&ALHIV's enrollment and retention in treatment. Before the exercise, only 71% of C&ALHIV enrolled in COVida in Inhambane were confirmed to be on treatment. After the exercise, this percentage was confirmed to be 96%.

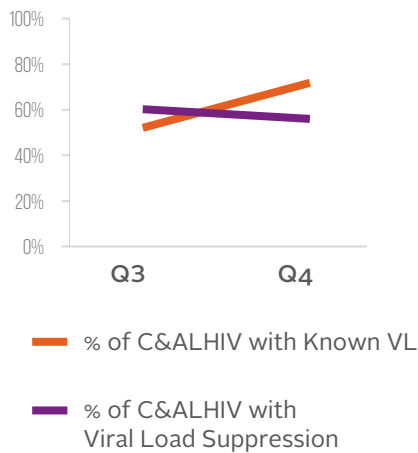
**COVida C&ALHIV Confirmed to be on ART in Inhambane Province, FY20/Q1-Q3**



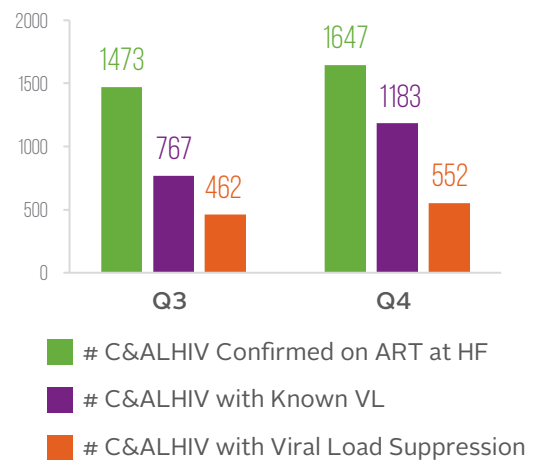
By using the VL data obtained, COVida was able to identify each child and adolescent who needed a VL test. As a result of these efforts, the proportion of C&ALHIV in Inhambane with known VL status increased from 52% in Q3 to 72% in Q4. COVida also intensified adherence support to those with high VLs. During this same period, the absolute number of virally suppressed C&ALHIV increased, but the proportion is diluted by

new children supported to learn their VL status. The data show that the proportion of children virally suppressed decreased from 60% in Q3 to 56% in Q4, indicating the need to provide enhanced adherence counseling to those C&ALHIV who are unsuppressed. HF's have agreed to provide additional training to COVida's community case workers on adherence and retention counseling for children and adolescents.

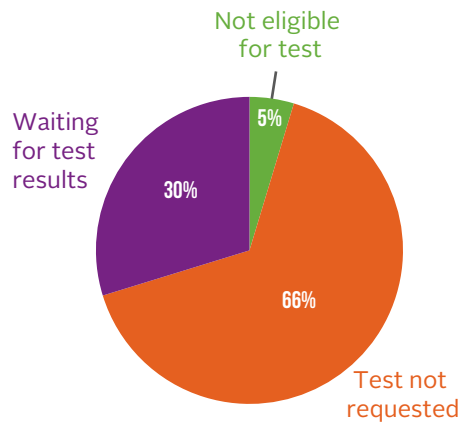
**COVida C&ALHIV — Known VL vs. Viral Suppression in Two Quarters**



**Viral Load Cascade Inhambane FY 20 Q3-Q4**



## Reasons for Unknown VL



The data triangulation experience also allowed COVida to identify, understand, and address the reasons and root causes for unknown VL status amongst C&ALHIV.

- **Clinicians did not request a test:** The Ministry of Health (MOH) just launched a campaign which aims to improve VL testing and suppression. Also, COVida is collaborating with HFs to set dates for sample collection and is using community case workers (activistas) to inform and accompany program beneficiaries to HFs.
- **Waiting for test results:** There are delays in the delivery of results because of distances between labs (centralized in provincial capitals) and HFs, and some results get lost in the delivery process. COVida is using the data to advocate with clinical partners and the MOH for decentralization and improved availability of VL tests.
- **C&ALHIV not eligible for VL testing:** COVida is using the data triangulation exercise to track VL testing eligibility among program beneficiaries five months after they initiate ART and informs them about sample collection at month six.

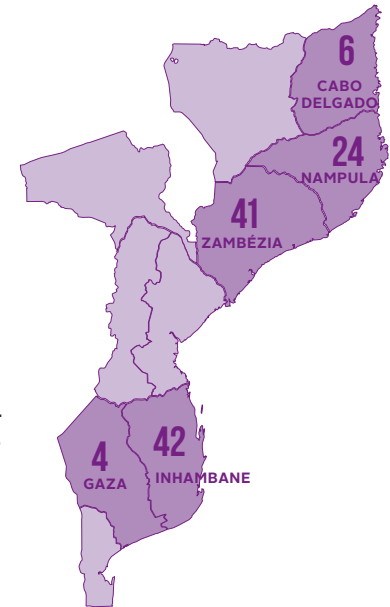
The data triangulation experience in Inhambane also contributed to increased synergies between COVida and EGPAF/HFs as follows:

- EGPAF trained COVida community case management cadres on ART adherence and VL testing to improve adherence support and promotion of VL testing at the community level.
- EGPAF facilitated COVida's access to C&ALHIV's VL data, including relevant information that will allow community case workers to track and support C&ALHIV, such as date of next medical appointment and multi-month dispensation of ART.
- EGPAF identified C&ALHIV who were not enrolled in the OVC program and referred them to COVida for enrollment.

Given the results obtained through the data triangulation exercise in Inhambane, COVida gradually expanded this

strategy to additional HFs in Inhambane and in other provinces. To support this expansion and build on lessons learned in Inhambane, COVida developed a standard operating procedure. During January through July 2020, COVida conducted data triangulation in 104 additional HFs as follows:

- 42 in Inhambane
- 41 in Zambézia
- 24 in Nampula
- 6 in Cabo Delgado
- 4 in Gaza



COVida is currently scaling up the data triangulation approach to all project sites. The project expects to have VL data for all C&ALHIV by the end of FY21/Q1 to use as baseline data.

## LESSONS LEARNED

- OVC programs need to rely on health facility VL data, not on client self-reports of adherence. Lack of knowledge about ART, medication side effects, and caregiver negligence all affect C&ALHIV's adherence.
- Data triangulation proved to be a beneficial approach for both COVida and EGPAF/HFs because it helped both identify and correct discrepancies and jointly address gaps related to adherence and access to VL testing.
- Data triangulation also increased awareness about the importance of collaborating and exchanging data between clinical partners and OVC programs. OVC programs can capitalize on the increased collaboration to enroll more C&ALHIV from HFs in the OVC program.

## CONCLUSION

Data triangulation is an effective strategy to identify gaps in pediatric ART linkage, retention, and viral suppression. Through this strategy COVida was able to: 1) confirm C&ALHIV's linkage to care, 2) confirm C&ALHIV's treatment adherence and identify those requiring more focused adherence support and VL monitoring, and 3) correct and align patient information in both COVida and HF files. COVida was also able to identify new C&ALHIV for enrollment in the OVC program. The collaborative nature of this exercise also contributed to strengthen coordination and synergies between the OVC program and the HIV clinical partners and HFs. These synergies will continue to improve treatment outcomes for C&ALHIV.