



**Innovative Approaches for
Eliminating Mother-to-Child
Transmission of HIV**

**Community Client Tracing
to Prevent Mother-to-Child
Transmission: Experiences from
Côte d'Ivoire, the Democratic
Republic of the Congo, and Malawi**

Optimizing HIV Treatment Access for Pregnant and Breastfeeding Women (OHTA), a UNICEF-supported initiative with funding from the Governments of Norway and Sweden, aimed to accelerate access to Option B+ for the elimination of mother-to-child transmission in Côte d'Ivoire, the Democratic Republic of the Congo, Malawi, and Uganda. Option B+ is an approach recommended by the World Health Organization in which all pregnant and breastfeeding women living with HIV are offered treatment with antiretrovirals for life regardless of their CD4 count.¹

The OHTA Initiative's primary focus was to strengthen the capacity of the primary health care system to deliver lifelong HIV treatment to pregnant and breastfeeding women; create demand for programmes aimed at preventing mother-to-child transmission (PMTCT), increasing uptake and timely utilization of PMTCT programmes by women, and retaining women in care; and strengthen monitoring and evaluation for decision making to improve service delivery.² The OHTA Initiative was implemented between 2012 and 2017 through in-country implementing partners.

The world has made tremendous progress in the fight against the HIV/AIDS epidemic. Between 2005 and 2016, AIDS-related deaths declined by 48 per cent, due largely to the scale-up of ART.³ The number of children dying of AIDS-related causes has also declined sharply, from 210,000 in 2010 to 120,000 in 2016. The work is far from done, however, as 2.1 million children under the age of 15 were living with HIV in 2016.³



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In Côte d'Ivoire, the Democratic Republic of the Congo, and Malawi, important strides have been made to address the HIV epidemic, including the provision and scale-up of PMTCT services. For example, all three countries have achieved an unprecedented decline in the number of children under age 14 acquiring HIV.³ In Côte d'Ivoire, the numbers dropped by 40 per cent, from 5,500 in 2010 to 3,300 in 2016. In the Democratic Republic of the Congo, the numbers dropped even more – by 65 per cent – from 8,200 in 2010 to 2,900 in 2016. Malawi saw the greatest reductions, where HIV incidence among children dropped by 75 per cent, from 17,000 in 2010 to 4,300 in 2016. Despite these accomplishments, in 2016 there were 2,600 AIDS-related deaths among children in Côte d'Ivoire, 2,800 in the Democratic Republic of the Congo, and 4,100 in Malawi.³ Additionally, although 73 per cent of pregnant women living with HIV in Côte d'Ivoire were receiving ART, more than 3,000 children were newly infected with HIV in 2016, and only 25 per cent of children living with HIV were on treatment.³ In the Democratic Republic of the Congo, 70 per cent of pregnant women living with HIV were receiving ART, but 2,900 children were newly infected with HIV in 2016, and only 30 per cent were on treatment.³ In Malawi, 84 per cent of pregnant women living with HIV were receiving ART, but 4,300 children were newly infected with HIV in 2016, and just under half (49 per cent) of children living with HIV were on treatment.³ Retaining women on treatment and following up with those who have dropped out of care or who have not received treatment are essential steps in the PMTCT care continuum.

Better service delivery and improved uptake, adherence, and retention in care are essential to achieving universal access to lifelong antiretroviral therapy (ART) for people living with HIV, and innovative approaches are often required. Around the world, community engagement programmes to increase uptake of PMTCT services have been implemented in a myriad of ways including through support groups, trained health counsellors, partner engagement, and community meetings. Such programmes make use of readily available personnel, such as volunteers, peer educators, community health workers (CHWs), and religious leaders, making them an effective model to improve uptake of PMTCT.⁴ Recent evidence on community engagement programmes have shown they increase ART initiation and retention among pregnant women living with HIV; increase uptake of testing and prevention services; and improve knowledge about HIV prevention.⁴ Community engagement programmes have also been shown

to positively impact the supply and demand for PMTCT services and support the creation of an enabling environment.⁵

Tracing clients who were lost to follow-up – those who did not return for care at the health facility – was a key activity within the OHTA Initiative. A number of community-based interventions for client tracing were identified as promising practices including the use of CHWs, Mentor Mothers, Health Surveillance Assistants (HSAs), and Expert Clients.⁵ Lessons learned from the implementation of these community client tracing programmes can be used to inform future PMTCT programming as well as global efforts to achieve universal access to lifelong ART and broader sexual and reproductive health programming for men and women.



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Community Client Tracing

The OHTA Initiative supported the Ministries of Health (MOH) and a number of implementing partners to facilitate community client tracing programmes in Côte d'Ivoire, the Democratic Republic of the Congo, and Malawi. The activities were implemented differently in each country and by different cadres of health workers and community members. In Côte d'Ivoire, CHWs participating in the community client tracing programme supported early antenatal care (ANC) and improved PMTCT retention and treatment adherence among mother-infant pairs through reminder phone calls and home visits. In the Democratic Republic of the Congo, the programme leveraged existing Mentor Mothers to conduct community client tracing for pregnant women living with HIV who had not returned to care three months after their scheduled ANC appointment. In Malawi, both HSAs and Expert Clients conducted community client tracing after clients missed appointments.

Country Approaches to Community Client Tracing

Community Health Workers: Côte d'Ivoire

In Côte d'Ivoire, CHWs in the community client tracing programme were unique among the CHWs in the country in that they also provided follow-up services with pregnant women and HIV-exposed children through reminder phone calls and home visits. During home visits, CHWs provided families with essential health information and encouraged them to visit the health facility. CHWs also registered all pregnant women in their community catchment areas and provided them with referrals to attend ANC. At the facility, CHWs conducted individualized and group health education sessions on PMTCT, HIV testing and counselling, and general health topics. All participating CHWs were equipped with job aids including tools for community sensitization on the importance of ANC and HIV service uptake as well as condoms and demonstrative props. They also received transportation reimbursements to conduct home visits and phone credits to make reminder phone calls. CHWs were identified and recruited for the community client tracing programme through the health facility and were recommended by the village chief. CHWs received an initial training at the beginning of the programme on HIV/AIDS, community engagement, family planning, social and behaviour change communication, and directives or guidelines from the MOH. During this initial training, they also conducted practice home visits under the supervision of the trainer. They received refresher trainings approximately once a year and were supervised and supported by health facility nurses.

“Mentor Mothers affected the results in treatment adherence because they have been able to reach out to patients who were lost to follow-up.”

– Health Worker, Democratic Republic of the Congo

Mentor Mothers: Democratic Republic of the Congo

Mentor Mothers – women living with HIV themselves – provide psychosocial and peer support, health education, and follow-up services to women living with HIV in their community. This approach is well established and documented and has been implemented in many countries.⁶⁻⁸ Under the OHTA

Initiative, Mentor Mothers in the Democratic Republic of the Congo aimed to strengthen community-facility linkages and prevent loss to follow-up of pregnant women living with HIV through community client tracing of those who did not return to care three months after their scheduled ANC appointment. Such clients were identified through health facility logs. Mentor Mothers made reminder phone calls and/or sent SMS messages to these clients, encouraging them to come back for continued services. If the Mentor Mothers were not able to reach certain clients by phone, or if the clients still did not come back to care, they then conducted home visits. During the home visits, Mentor Mothers provided individualized health education including information on the importance of PMTCT, treatment adherence, ANC, and hygiene. To further encourage attendance at ANC, women received a health kit containing individual hygiene products after attending their first ANC visit and another health kit with a small baby bucket and baby cloth after completing their fourth ANC visit.



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As in Côte d'Ivoire, all Mentor Mothers in the Democratic Republic of the Congo were provided with transportation reimbursements to conduct home visits and phone credits to remind clients of ANC appointments. The Mentor Mothers had at least two years of experience in the PMTCT programme themselves and had to be willing to share their experience living with HIV with other women. All Mentor Mothers in the programme received a three-day training on HIV testing and communication skills by the National AIDS Control

Programme and received ad hoc trainings as new guidelines became available or as necessary. Health facility staff directly supervised Mentor Mothers and also received training on the programme. Health facility staff and Mentor Mothers met once a month for supervision and to discuss strategies to improve outreach and counselling during home visits. Additionally, health facility staff, district health offices, implementing partners, and UNICEF staff managing the OHTA Initiative in-country met four times a year for regional supervisory review meetings and twice a year for national-level review meetings.

“We have seen that the numbers are decreasing which means HSAs are doing a good job ... HSAs are reminding clients and when defaulters are found they come back to the hospital to take their drugs.”

– UNC staff, Malawi

Health Surveillance Assistants and Expert Clients: Malawi

HSAs are paid MOH employees who play various roles in the health facility while Expert Clients are community members living with HIV and adhering to treatment who volunteer at the health facility to support others living with HIV. Under the OHTA Initiative, both HSAs and Expert Clients conducted community client tracing after clients missed appointments to prevent loss to follow-up. The University of North Carolina (UNC) enhanced the national HSA programme to strengthen follow-up services by providing training, supervision, and mentorship to HSAs and Expert Clients. UNC provided each health facility with one or two bicycles for HSAs and Expert Clients to use to conduct home visits and also provided them with lunch allowances when they made home visits. However, given that most health facilities in the programme had more than two HSAs or Expert Clients, not all had access to a bicycle. Additionally, the programme did not provide funding for the maintenance of the bicycles; it was up to the HSAs and Expert Clients to pay for any required maintenance.

“ANC is a good entry point for PMTCT, the impact allows us to provide sensitization and then make services more available more often.”

– District Health Official, Côte d’Ivoire

When a pregnant woman attended her first ANC session she was offered an HIV test and asked if she would like to receive reminder phone calls for appointments and follow-up visits, regardless of her test results. If the woman agreed, she left her contact information with the health facility. A senior HSA reviewed the health facility appointment logs weekly to identify pregnant women living with HIV and HIV-exposed infants who had missed appointments or those who had not returned to receive the results of their HIV test. When clients were identified, the senior HSA would notify the other HSAs or Expert Clients to call them and/or conduct a home visit to remind them to come back to care. During home visits, HSAs and Expert Clients discussed the reasons the woman did not come back to care and tailored their counselling to the individual client’s barriers and potential solutions. During home visits, ARTs and other confidential health information – such as HIV test results – were not provided as women were encouraged to return to the health facility.



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HSAs had to have graduated from high school and were screened through a formal interview process. Expert Clients were often already volunteers at the health facility and were recruited by village chiefs to support the health facility. Under the OHTA Initiative, HSAs received a three-day training from UNC in addition to their initial six-week training conducted by the MOH. The additional three-day training covered such topics as HIV, PMTCT, milestones for HIV-exposed infants, counselling approaches, and guidance on how to complete reporting forms. HSAs and Expert Clients received mentorship and supervision through quarterly meetings with medical assistants, doctors, nurses, UNC and UNICEF staff managing the OHTA Initiative in-country, and other implementing partners where they assessed progress, discussed challenges, and identified solutions.

“The best component is] working with the community to make it more sustainable ... So the community is more empowered and involved to continue implementation.”

– District Health Official, Côte d’Ivoire

Locations

The community client tracing programmes were implemented in various districts throughout the three countries.

- The CHW-led community client tracing programme in Côte d’Ivoire was implemented in four districts comprising Bouake, Daloa, Portboue Vridi Koumassi, and Treichville.
- The Mentor Mother community client tracing programme in the Democratic Republic of the Congo was implemented in six health zones each in Katanga and Nord-Kivu provinces.
- The HSA community client tracing programme was implemented in 20 health facilities in Lilongwe, Malawi, 15 of which also made use of Expert Clients.

Role of the OHTA Initiative and Implementing Partners

The OHTA Initiative provided critical financial resources and support for researching, implementing, and documenting each country's community client tracing programme. In addition to the financial resources, the OHTA Initiative provided training and logistics support and technical assistance in monitoring and evaluation. When applicable, the OHTA Initiative also facilitated knowledge exchange and learning among sites implementing the programme within the country. In each country, the MOH worked with various partners to implement the community client tracing programmes

Partners	Role
Ministry of Health	The MOH and respective national HIV/AIDS programme supported the design, training, implementation, and monitoring and evaluation of each programme in the three countries.
District Health Offices	Across the three countries, district health offices aided in the development of strategic plans, identification of site locations, data collection and analysis from the health centres, monitoring and evaluation, and coordination between implementing partners and the various cadres of health workers. Health facilities in each district also supported the programme in varying ways including with supervision and monitoring and evaluation.
Implementing partners	Implementing partners in each country played various roles including implementation, training, and supervision. Ariel Glaser, Akwaba, Femmes Actives, and Santé Espoir Vie Côte d'Ivoire all played various roles in the implementation of the community client tracing programme in Côte d'Ivoire and the University of North Carolina led the programme in Malawi.

Community Client Tracing Outcomes

Overall, community client tracing programmes in Côte d'Ivoire, the Democratic Republic of the Congo, and Malawi:

- Strengthened and expanded the provision of ANC and PMTCT services
- Nurtured a supportive environment for mother-infant pairs

to adhere to treatment and stay in care

- Reinforced the importance of HIV testing and treatment adherence among exposed infants and families
- Strengthened community-facility linkages for tracing mother-infant pairs and reducing their loss to follow-up
- Increased knowledge of the importance of ANC and PMTCT in the community
- Strengthened the quality and accuracy of health information provided to community members
- Improved coordination between health facility staff including nurses and CHWs
- Helped address community-level misconceptions and misinformation regarding HIV
- Returned pregnant women living with HIV and HIV-exposed infants to care

“This approach is quite feasible in a low-resource setting. The mentorship, bicycle, and education is a good strategy that can be duplicated somewhere else. It requires initial training, refresher courses, and mentorship.”

– UNC staff, Malawi

Essential Components and Factors for Success

Several factors were identified as essential to the success of the community client tracing programmes including:

Individual

- Several types of monetary and non-monetary incentives motivated the various cadres of health workers and community members to continue participating in the programme.

Interpersonal

- Reminder phone calls and home visits encouraged women to attend ANC services and increased their level of knowledge about the importance of ANC and PMTCT.
- Individualized psychosocial support provided through home visits and reminder phone calls provided a private setting

for women to ask questions and allowed health workers to identify and respond to community-level barriers to accessing care.

Community

- Community sensitization activities, such as community radio programmes or discussions with local leaders, were key to ensuring the community was aware and accepting of the programme.
- Leveraging health care workers and volunteers who lived in the communities in which they served built trust in the programme, aided sustainability, and helped to address community-level barriers to accessing care.

Facility

- Collaboration and coordination among various cadres of health workers, for example HSAs and Expert Clients in the same clinic, allowed the programme to identify women for follow-up services, develop strategies to improve follow-up, and assess PMTCT progress.

Structural

- Receiving national-level buy-in and support of the programme strengthened sustainability and acceptability of the programme and provided the opportunity to leverage and build upon existing structures like CHWs.
- Continued supportive supervision and mentorship structures ensured those implementing the programme received the support they needed, improved the quality of information provided, and strengthened reporting.
- Tailored, quality training better prepared those implementing the programme for their specific roles and responsibilities and helped ensure overall quality of the programme.
- Dedicated time for various stakeholders to review community-level data allowed the programme to assess progress, discuss challenges, and identify solutions.

Cross-Country Learnings

Community Involvement

In all three countries, the community client tracing programme relied on community actors, including CHWs, Mentor Mothers, and Expert Clients. Malawi also leveraged HSAs, MOH-funded facility staff, to conduct community client tracing in collaboration with Expert Clients. The involvement of community leaders, specifically village chiefs, played a key role in the success of the programme in Côte d'Ivoire and Malawi by identifying and recommending community members to be CHWs or Expert Clients.

Health Workforce

Each country relied on existing structures to improve community client tracing. In Côte d'Ivoire, the programme expanded the role of existing CHWs to conduct follow-up services. In the Democratic Republic of the Congo, the programme relied on existing Mentor Mother structures, and in Malawi on HSAs.

Community-Facility Linkages

In all three countries, CHWs, Mentor Mothers, and Expert Clients coordinated with health facility staff to identify women who needed follow-up services. This coordination and consistent communication between health facility staff and community members strengthened community-facility linkages and transparency. Additionally, health facilities in Côte d'Ivoire relied on the CHWs to make frequent visits in the community to document all pregnant women and encourage them to attend ANC and receive an HIV test. Similarly, CHWs, Mentor Mothers, HSAs, and Expert Clients were all supervised by health facility staff. However, two of the programmes – Mentor Mothers in the Democratic Republic of the Congo and HSAs and Expert Clients in Malawi – also conducted scheduled supportive supervision meetings with supervisors and other relevant stakeholders. These supportive supervision sessions allowed their experiences and insights to be used to inform health facility decision making and ensured relevant information from the community was fed back to the facility.

Incentives

Only one programme, the Mentor Mother programme in the Democratic Republic of the Congo, provided women with a monetary incentive to encourage them to attend ANC visits. Under the programme, women received two baby health kits – one for attending their first ANC visit and the second after the fourth ANC visit. More often, the programmes relied on non-monetary incentives to encourage participation in ANC such as individualized support through home visits and increased knowledge regarding PMTCT.

Training

Training was seen as an essential component in all three countries; however, it was implemented slightly different in each. In Côte d'Ivoire, CHWs not only learned about how to conduct effective home visits but also practiced conducting home visits under the supervision of the facilitator during training. This allowed CHWs to receive rapid feedback and practice in a supervised environment. In the Democratic Republic of the Congo, Mentor Mothers and the health facility staff that supervised them received the same training. This helped ensure that roles and responsibilities were clear and that everyone received the same information. The Malawi HSA and Expert Client programme leveraged the existing HSA

MOH training to add on a three-day training for both HSAs and Expert Clients on topics specific to the programme, including PMTCT.

“It has been successful because of the reports. We review the reports every month, then the reports go to the MOH coordinator so it’s captured nationally ... If something went wrong, we talk to the HSAs to understand the mistakes.”

— HSA, Malawi

Considerations for Scale-Up and Sustainability

Through the OHTA Initiative, community client tracing programmes in Côte d’Ivoire, the Democratic Republic of the Congo, and Malawi strengthened community-facility linkages and played critical roles in supporting PMTCT services and preventing loss to follow-up. Several factors should be weighed when considering replicating or scaling up community client tracing programmes nationally or in other settings.

- **Adaptability:** A key component of any community engagement programme is to adapt activities to the specific needs of the community. Different strategies should be considered to meet the needs of each context. For example, strategies to identify and conduct follow-up visits with pregnant women will be different in rural areas where health workers may have to travel long distances to conduct home visits versus in urban areas where people may move more frequently and may not know one another. Additionally, counselling messages should be adapted in every context to respond to community-level misconceptions regarding HIV.
- **Funding:** Consistent funding should be available to support the needs of the programme and ensure continued motivation and participation among the various health workers and community members conducting client tracing. For example, monetary incentives such as modest salaries, transportation reimbursements, lunch allowances, cell phone minutes, and the provision of shared bicycles should be considered. Non-monetary incentives should also be considered, especially for volunteers, to bolster motivation,

and could include community recognition, certificates, or continued education. Additionally, funding should be available to maintain key aspects of the programme, such as finances for HSAs and Expert Clients to fix the bicycles when they break, and to support continued quality and sustainability of the programme.

- **Health workforce:** National buy-in from the government on the importance of community client tracing for PMTCT is essential in order to leverage the role of existing health cadres and/or community groups. Additionally, existing health workforce structures should be examined in scaling up any community engagement programme to ensure the quantity of available and trained health cadres is sufficient to provide supportive supervision.
- **Standardization:** Standardized tools for monitoring and evaluation could increase efficiency, ensure quality data, and allow for comparisons across sites. Additionally, trainings for all health workers, community members, and supervisors implementing the community engagement programme should be standardized to ensure quality in the programme.

“I started here as a volunteer to help at the facility ... Then I started as an Expert Client for two years. I started volunteering because it was an initiative by the chief ... The chief said the health centre could not manage alone.”

— Expert Client, Malawi

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For more information about the OHTA Initiative, visit <http://childrenandaids.org/optimizing%20HIV%20treatment%20access>

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Methodology for Documenting Community Client Tracing as a Promising Practice

The Johns Hopkins Center for Communication Programs (CCP) supported the documentation of this promising practice. Information and data were collected through a desk review of existing OHTA Initiative documents, including annual reports, partner reports, and presentations. Site visits by CCP and project staff were also conducted, including interviews and focus group discussions among implementing organizations, Ministries of Health, and programme implementers.