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

Community Client Tracing Through Health Surveillance Assistants and Expert Clients in 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.

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. The OHTA Initiative was implemented between 2012 and 2017 through in-country implementing partners.

Between 2010 and 2016, Malawi made great progress in reducing mother-to-child transmission of HIV. Since 2010, new HIV infections and AIDS-related deaths have decreased by 46 per cent and 47 per cent, respectively, and the number of children acquiring HIV declined dramatically – from 17,000 new HIV infections among children in 2010 to 4,300 in 2016. Despite these accomplishments, in 2016 there were an estimated 4,100 AIDS-related deaths among children 0 to 14 years old. Additionally, although 84 per cent of pregnant women living with HIV were receiving ART, more than 4,000 children were newly infected with HIV in 2016 and just under half (49 per cent) of children living with HIV were on treatment. Ensuring women adhere to treatment, retaining them in care, and following up with those who have dropped out of care or who have not received treatment are essential to eliminating mother-to-child transmission.

Better service delivery and improved uptake, adherence, and retention in care are essential to the achievement of universal access to lifelong antiretroviral therapy (ART) for people living with HIV, and innovative approaches are often required. Community engagement programmes have been implemented in a myriad of ways, including through support groups, trained health counsellors, partner engagement, and community meetings, to increase uptake of PMTCT services. They utilize readily available personnel such as volunteers, peer educators, community health workers, and religious leaders, making them an effective model to address PMTCT. Recent evidence on community engagement programmes have shown they increase the number of pregnant women living with HIV who initiate ART and remain on treatment, increase uptake of testing and prevention services, and increase knowledge about HIV prevention. 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.

Tracing clients who were lost to follow-up – those who did not return back for care at the health facility – was a key activity within the OHTA Initiative. Several community-based interventions for client tracing were identified as promising practices in the countries in which the OHTA Initiative was implemented. In Malawi, the Ministry of Health (MOH), the district health offices, the University of North Carolina (UNC), and the OHTA Initiative trained and incentivized Health Surveillance Assistants (HSAs) and Expert Clients to improve community client tracing. The HSA programme covered

“I have seen a lot of people adhering to treatment and people not stopping once they are on treatment. We provide health education at the community level with the support of the chief.”

— Expert Client, Malawi
20 health facilities in Lilongwe, of which the Expert Clients covered 15 facilities to improve adherence, retention, and community-facility linkages.

What Is Community Client Tracing?

Under the OHTA Initiative, both HSAs and Expert Clients conducted community client tracing after clients missed health facility appointments to prevent their loss to follow-up. HSAs are paid MOH employees who play various roles in health facilities and communities. In contrast, Expert Clients are community members living with HIV and adhering to treatment who volunteer at the health facility to support others living with HIV in their community.

Nationally, infants are considered lost to follow-up if a caregiver has not contacted the health facility within two months of the missed appointment, and mothers living with HIV on ART are considered lost to follow-up two months after they are expected to run out of ART. However, in order to ensure that infants living with HIV received timely care and treatment, under the programme mother-infant pairs were considered lost to follow-up 14 days after missing a scheduled appointment.

When a pregnant woman attended her first antenatal care (ANC) session, she was offered an HIV test. During the first ANC visit all pregnant women, regardless of their HIV status, were asked if they would like to receive reminder phone calls for appointments and follow-up visits. If the woman agreed, she left her contact information with the health facility. A senior HSA would then review health facility appointment logs weekly to identify pregnant women living with HIV and HIV-exposed infants who missed appointments or those who did not come back to receive the results of their HIV test. When such clients were identified, an HSA or Expert Client called them to remind them to come back to care. If the HSA or Expert Client was not able to reach the client by phone, or if the client did not come back to care, the HSA or Expert Client conducted a home visit.

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. They also discussed the importance of healthy nutrition during pregnancy, exclusive breastfeeding, and other pertinent health topics. The HSAs and Expert Clients did not provide ART and confidential health information – such as HIV test results – during home visits in order to encourage women to return to the health facility.

Recruitment and Motivation of HSAs

Advertisements for vacant HSA positions were posted at the health facility through the MOH. HSAs were screened through a formal interview process and had to have graduated high school. 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 for 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. Therefore, it was up to the HSAs and Expert Clients to pay for any required maintenance. HSAs were motivated by the acquisition of new skills and the provision of a modest salary, shared bicycles for client tracing, and small travel and food incentives. Expert Clients were often already volunteers at the health facility, and were recruited by village chiefs to support the health facility with follow-up services. Expert Clients were motivated by recognition from the chief and a sense of duty to the community – to prevent the spread of HIV and support others living with HIV.

Training and Supervision of HSAs and Expert Clients

Under the OHTA Initiative, UNC enhanced the national HSA programme to strengthen follow-up services by providing training, supervision, and mentorship to HSAs and Expert Clients. HSAs received an initial six-week training in health
information, facilitated by the MOH. The training covered HIV prevention, PMTCT, immunization, nutrition, and hygiene. UNC facilitated an additional three-day training on topics such as challenges and milestones for HIV-exposed infants, counselling approaches, and how to complete reporting forms. The three-day training was provided to all current HSAs. New HSAs hired after this training were taught on the job by HSAs who had attended the training. HSAs trained in the three-day training provided this training to subsequent HSAs hired after the training occurred.

HSAs and Expert Clients received mentorship and supervision through quarterly meetings with medical assistants, doctors, nurses, UNC staff, and other implementing partners. Additionally, UNC staff visited high-volume facilities twice each quarter to provide additional support. During quarterly review meetings, they assessed progress, discussed challenges, and identified solutions. Expert Clients were provided with a small transportation and lunch allowance to attend quarterly review meetings.

“This approach [community client tracing] 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.”

— EGPAF Staff Member, Malawi

Outcomes of the Community Client Tracing Programme

Between October 2013 and September 2015, HSAs identified 2,707 HIV-exposed infants who missed an appointment. Of these, 77 per cent of their caregivers were successfully reached by phone or through a home visit and 95 per cent of the infants were returned to care. Of those who returned to care, 50 of the infants had HIV infection, all of whom were initiated on ART.

In addition, HSAs identified 245 mother-infant pairs in 2016 who were lost to follow-up, of which 194 were traced and 85 were brought back to care.

In 2016, Expert Clients identified 104 HIV-exposed infants, 208 mothers on ART, and 141 children on ART as lost to follow-up. Of these, 68 per cent of HIV-exposed infants, 50 per cent of mothers on ART, and 59 per cent of children on ART were returned to care.

Through the course of the programme, HSAs and Expert Clients:

• Strengthened community-facility linkages for tracing those lost to follow-up
• Increased the level of knowledge regarding PMTCT and ANC in the community
• Improved community-facility linkages to reduce loss to follow-up
• Returned pregnant women living with HIV and HIV-exposed infants to care
• Reinforced the importance of HIV testing among exposed infants and among families in general

“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
- Nurtured a supportive community environment for PMTCT services
- Reinforced the importance of maintaining and adhering to treatment

“They [UNC, through the OHTA Initiative] encourage us and do capacity building with us through refreshers now and then to remind us. It’s supportive supervision. If we don’t do it quarterly, then we find the system is again broken.”
— HSA, Malawi

Essential Components and Factors for Success

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

**Individual:**
- A number of factors motivated HSAs and Expert Clients, including the desire to prevent the spread of HIV and support those living with HIV, the provision of shared bicycles and small travel and food incentives, and, in the case of HSAs, earning a modest salary

**Interpersonal:**
- Reminder phone calls motivated those who were lost to follow-up to return to care
- Individualized peer support and education through home visits reinforced the importance of adhering to treatment

**Community:**
- Support from local chiefs helped to identify and motivate Expert Clients to support the programme
- Peer education and support addressed community misconceptions, stigma, and discrimination

**Facility:**
- Leveraging existing health facility staff helped ensure success of the community client tracing programme
- Coordination between HSAs, Expert Clients, and other health facility staff helped to identify clients lost to follow-up, coordinate defaulter tracing activities, and report on progress

**Structural:**
- Formal data review meetings assessed progress and provided a venue to discuss challenges and identify solutions
- Quality training prepared HSAs and Expert Clients for their role
- Continuous supportive supervision supported HSAs and Expert Clients
- National buy-in ensured resources were invested in the community client tracing 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

Considerations for Scale-Up and Sustainability

Through the OHTA Initiative, HSAs and Expert Clients provided follow-up services to pregnant women and HIV-exposed infants that strengthened community-facility linkages and supported PMTCT. Several factors should be weighed when considering replicating or scaling up this practice nationally or in other settings.

**Stakeholders:** National and district-level government leadership buy-in on the importance of community client tracing for PMTCT is essential in order to leverage the role of existing HSAs or other available health cadres.

**Adaptability:** Client tracing programmes should be tailored for each site to address the unique context of the community. For example, differences between rural and urban locations should be considered, including strategies for follow-up in urban areas where populations may move more often and in rural areas where the distances HSAs and Expert Clients are expected to travel may be greater. Additionally, counselling messages should be
adapted in every context to respond to community-level misconceptions regarding HIV.

- **Financing**: Consistent funding is required for the provision of bicycles to the health facility, including ensuring there are enough bicycles available for each HSA and Expert Client at each facility to reduce transportation barriers for follow-up visits. Additionally, funding for the maintenance of the bicycles should be considered to reduce costs incurred by HSAs and Expert Clients and ensure continued motivation to conduct follow-up visits. Finally, given that Expert Clients are volunteers, additional funding for small monetary incentives should be considered to maintain their participation and recognize their support to the programme.

- **Standardization**: Standardized training and tools for monitoring and evaluation increases efficiency, reduces errors in the data, and allows for comparisons across sites.

- **Capacity building**: Continuous supportive supervision and mentorship are key to ensure HSAs and Expert Clients contribute to quarterly facility- and community-level data review meetings and collaboratively develop solutions with support from technical staff.

### References


### Methodology for Documenting the Community Client Tracing Programme 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. organizations, Ministries of Health, and programme implementers.

For more information about the OHTA Initiative, visit [http://childrenandaids.org/optimizing%20HIV%20treatment%20access](http://childrenandaids.org/optimizing%20HIV%20treatment%20access).

For more information about UNICEF’s HIV and AIDS programme, visit [childrenandaids.org](http://childrenandaids.org).

This paper is published by the HIV and AIDS Section, United Nations Children’s Fund, 3 United Nations Plaza, New York, NY 10017, USA.


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