Circle of Hope: Using faith-based community outreach posts to increase HIV case finding, linkage and retention on treatment in urban and rural settings in Zambia

**COUNTRY:** Zambia  
**IMPLEMENTING PARTNER:** CRS

Antiretroviral treatment (ART) coverage for people living with HIV (PLHIV) in Lusaka Urban District (the capital and largest city in Zambia) was estimated to be near 70 percent in January 2019, with lower coverage for children, men, and young adults. In March 2018, recognizing that growth in the HIV treatment program had plateaued, CoH leadership, in coordination with CRS, created a new model to identify PLHIV and immediately link to same-day ART initiation. Critical elements of the model include: its acceptability by the service utilizer, the location of the community posts, the stakeholder engagement of the local community, and the selection of local CHWs who know the geographic and social terrain of the surrounding community. After implementing the community post model, CoH saw immediate and sustained increase in HIV case identification. Ninety-two percent of HTS_POS from March 2018 – March 2019 reported by CoH were identified at the community posts; only 8 percent were from the central facility.

**WHAT WAS THE PROBLEM?**

Antiretroviral treatment (ART) coverage for people living with HIV (PLHIV) in Lusaka Urban District (the capital and largest city in Zambia) was estimated to be near 70 percent in January 2019, with lower coverage for children, men, and young adults. Furthermore, Lusaka has a transient population, and new HIV transmission routes can undermine the gains in treatment coverage. These challenges require innovative approaches to identify PLHIV who are less likely to seek care at traditional hospitals and ART facilities.

**WHAT IS THE SOLUTION?**

Circle of Hope (CoH) is a non-governmental organization that was formed in 2005 by the Northmead Assembly of God (NAOG) church in Lusaka in response to the HIV/AIDS epidemic. CoH is a sub-grantee under an existing CDC Zambia cooperative agreement with Catholic Relief Services (CRS). CoH’s central and main ART facility in
Lusaka provides comprehensive HIV testing and treatment services, and in January 2018 had 3,565 PLHIV on treatment. In March 2018, recognizing that growth in the HIV treatment program had plateaued, CoH leadership, in coordination with CRS, created a new model to identify PLHIV and immediately link to same-day ART initiation. The model has the following elements:

- Decentralization of service delivery, including HIV testing, ART initiation and continuation, and phlebotomy, from an ART facility to static community posts (five posts in early 2018, since expanded to 21)
- Community mapping to identify hot spots of individuals at high-risk for HIV transmission to inform the placement of static community posts
- Each community post is staffed by a multidisciplinary team: one psychosocial counselor and tester, one ART initiator (clinical officer), four community-health workers (CHWs) [gender-balanced with ≥two CHWs local to the surrounding community, and most commonly a trusted member of a faith community], and one data associate.
- Each community post is seamlessly embedded in a high activity and busy setting (e.g., markets, bus stations or church premises) to establish a catchment area and has minimal branding and footprint to allow for confidential service delivery
- Early and continued engagement of local stakeholders (community leaders, including faith leaders) and use of expert clients among staff and CHWs to build community trust
- Continuous mentoring and feedback to community post teams to assess progress, identify barriers, and build morale, including the use of monetary incentives, daily targets and performance updates using mobile technology, and quarterly non-monetary recognition and awards.

Critical elements of the model include: its acceptability by the service utilization, the location of the community posts, the stakeholder engagement of the local community, and the selection of local CHWs who know the geographic and social terrain of the surrounding community.
WHAT WAS THE IMPACT?

After implementing the community post model, CoH saw immediate and sustained increase in HIV case identification (Figure 1). Ninety-two percent of HTS_POS from March 2018 – March 2019 reported by CoH were identified at the community posts; only 8 percent were from the central facility.

**Figure 1. Monthly HTS_POS reported by Circle of Hope to PEPFAR before (October 2017 – February 2018) and after (March 2018 – March 2019) the introduction of community posts**

By targeting individuals at higher risk for HIV infection and emphasizing index testing for newly-identified cases, CoH has been able to achieve remarkably high yields (Figure 2 and Table 1). Following the introduction of community posts, unbeknownst to CoH staff, many PLHIV already on ART at other facilities in Lusaka were re-testing as a means of transferring to CoH sites, a reflection of this model’s popularity among clients. This partially explains the very high yields between May – August 2018. Upon discovery of this phenomenon, CoH re-trained testing counselors to screen for treatment transfers. This improved screening process is reflected in the testing yields from more recent months. While these yields continue to surpass the estimated prevalence in untreated PLHIV in these communities, they are not inflated due to silent transfers.
Figure 2. Monthly testing yield (HTS_POS/HTS) reported by Circle of Hope to PEPFAR before (October 2017 – February 2018) and after (March 2018 – March 2019) the introduction of community posts.

Footnote: By comparison, quarterly testing yield (dashed line) reported to PEPFAR for Lusaka Province was 7.6% (FY18Q1), 6.5% (FY18Q2), 5.8% (FY18Q3), 5.7% (FY18Q4), 5.1% (FY19Q1), and 5.6% (FY19Q2).
Table 1. Index Testing results reported by Circle of Hope since the introduction of Community Posts (March 2018 – March 2019)

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>REPORTED BY COH</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL INDEX CONTACTS TESTED FOR HIV</td>
<td>1535</td>
</tr>
<tr>
<td>INDEX CONTACTS HIV_POS</td>
<td>964</td>
</tr>
<tr>
<td>INDEX POSITIVITY YIELD (%)</td>
<td>62.8%</td>
</tr>
<tr>
<td>TX_NEW</td>
<td>964</td>
</tr>
<tr>
<td>True TX_LINKAGE (%)</td>
<td>100%</td>
</tr>
</tbody>
</table>

The success in case-finding has translated to an increase in PLHIV newly initiating ART (Figure 3). Due to the availability of same-day, on-site ART initiation and the support provided by CoH staff and volunteers, true linkage of newly-identified HTS_POS has been 96 percent or higher each month.

Similar to HTS_POS results, 92 percent of TX_NEW from March 2018 – March 2019 initiated ART at community posts. The new initiations of ART have resulted in impressive growth of CoH ART program (Figure 4). Of the nearly 5,600 PLHIV who initiated ART at health posts, retention in care, defined by the percentage of PLHIV initiating ART from March 2018 – March 2019 who were still active on treatment as of March 2019, was estimated at 92 percent.
Figure 3. Monthly TX_NEW reported by Circle of Hope to PEPFAR before (October 2017 – February 2018) and after (March 2018 – March 2019) the introduction of community posts.

Figure 4. TX_CURR reported by Circle of Hope to PEPFAR since the introduction of community posts (March 2018 – March 2019).
In terms of identifying harder-to-reach populations, CoH has successfully reached, tested, linked, and retained adult males, adolescents, and children (Table 2 and Table 3). Detailed testing results by age and sex show high testing yields across populations (Figure 5). This model sees particularly high yields in men ages 20 years or older.

Table 2. Results of HIV testing for men reported by Circle of Hope to PEPFAR since the introduction of community posts, March 2018 – March 2019.

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>REPORTED BY COH</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL MEN TESTED</td>
<td>10,091</td>
</tr>
<tr>
<td>TOTAL MEN POSITIVE</td>
<td>2358</td>
</tr>
<tr>
<td>POSITIVITY YIELD (%)</td>
<td>23.3%</td>
</tr>
<tr>
<td>TX_NEW</td>
<td>2405</td>
</tr>
<tr>
<td>True TX_LINKAGE (%)</td>
<td>101.9%</td>
</tr>
<tr>
<td>TX_CURR</td>
<td>3200</td>
</tr>
<tr>
<td>OVERALL RATIO OF MEN TO WOMEN</td>
<td>4:6</td>
</tr>
</tbody>
</table>
Table 3. Results of HIV testing for adolescents and children reported by Circle of Hope to PEPFAR since the introduction of community posts, March 2018 - March 2019.

<table>
<thead>
<tr>
<th>INDICATOR</th>
<th>REPORTED BY COH</th>
</tr>
</thead>
</table>
| TOTAL TESTED       | Adolescents: 1672  
 |                    | Children: 2430    |
| TOTAL POSITIVE     | Adolescents: 76   
 |                    | Children: 116     |
| POSITIVITY YIELD (%)| Adolescents: 4.5% |
 |                    | Children: 4.7%    |
| TX_NEW             | Adolescents: 76   
 |                    | Children: 115     |
| True TX_LINKAGE (%)| Adolescents: 100% |
 |                    | Children: 99.1%   |
| TX_CURR            | Adolescents: 131  
 |                    | Children: 219 - (2.5%) |

Figure 5. HIV testing volume and yield by age and sex reported by Circle of Hope to PEPFAR since the introduction of community posts, March 2018 – March 2019.
HOW DOES IT WORK?

INDIVIDUAL LEVEL
The target populations are individuals at higher risk for HIV acquisition due to mobility, geographic proximity to hotspots, and higher-risk behaviors. Risk assessment is informal and typically begins with assessment of characteristics known through trusted relationships with faith community leaders, such as marriage/relationship problems, recent family death or serious illness, and participation in healing services. In May 2019, the Zambia Ministry of Health approved a standardized risk assessment tool to be used for HIV provider-initiated testing and counseling; CoH has since started using this tool to strengthen their risk assessments. Once specific individuals at risk for HIV have been identified, the CHWs reach out to them and invite them in for testing and services at the community outpost. Use of self-testing can be incorporated into the outreach to help confirm risk and incentivize linkage to care.

SERVICE DELIVERY LEVEL
Many of the targeted individuals are located in urban informal settlements, and participate in the informal economy; CoH targets areas such as informal settlements or areas with high population or informal commercial density. CoH engages with community leadership (e.g., market chairperson, bus stop chairperson) in the targeted areas, to identify suitable locations and negotiate support, including reduced rental costs, security, and waste pick up for the community posts. Although access to services is not limited to clients of a specific age, the location of the community post in markets and bus stops (and in some cases, churches) provides access to working adults, including a significant number of men, who are attracted to the fairly discreet community posts, which have shorter patient wait times than typical health facilities (under an hour at community posts compared to five or more hours at health facilities). Offering services closer to where people of lower socio-economic status work and live improves access to health services by men and other target populations that are less likely to access a health facility.

The decentralization of HIV services from a central facility to the community posts, along with the engagement of trusted persons from the community as staff, are important parts of this model. Services provided at the community post include:

- HIV counseling and testing
- ART initiation
- Co-trimoxazole treatment
- TB screening and preventive therapy
- Phlebotomy laboratory testing (as needed)
- ART continuation, including multi-month prescriptions for eligible clients
- Index testing and partner notification services
PEPFAR SOLUTIONS
PLATFORM (BETA)

- Viral load testing
- Enhanced adherence counseling for clients with unsuppressed viral load, focused on addressing drivers and barriers to improved medication adherence
- STI screening & treatment
- Primary health care
- Cervical cancer screening (once a week)
- Basic tests for non-communicable diseases such as diabetes, hypertension, and malaria

The provision of these services at the community posts through a strong customer care model is designed to maximize client preferences for accessible, personal, time-efficient, and comprehensive care.

HEALTH SYSTEMS LEVEL

The CoH community post model helps address one of the challenges of the growing ART program in Lusaka – large, centrally-located treatment facilities with increasing patient volume. Prior studies have shown that patients often spend five or more hours at these facilities to complete their visits, and that does not include other time and resource expenditures, including transportation, missed work, and family commitments. While these facilities are scaling up differentiated service delivery models to help address this concern, the CoH community posts are filling a current void for locally-available, time-efficient, and comprehensive services.

LOCAL ENVIRONMENT

The NAOG church is one of the largest Pentecostal churches in Zambia and CoH was set up as a means of engaging Zambia’s Pentecostal churches in the HIV response. Over 1,400 churches in various parts of the country belong to this network (Pentecostal Assemblies of God, Zambia) and are served by CoH which hosts an “HIV Desk” as a resource to the over 1,000 pastors that are part of its network. They provide training and HIV/AIDS information to the network. CoH has also collaborated with other faith-based groups in the HIV/AIDS response including the Evangelical Fellowship of Zambia (EFZ), Expanded Church Response (ECR) Zambia, Churches Health Association of Zambia (CHAZ), Chreso Ministries and the National AIDS/STI/TB Council. All of these organizations are either current or former PEPFAR Zambia partners.

Local leaders, civil society, and expert clients are engaged in this model from the very beginning – in identifying hotspots, securing space and resources for static community posts, building demand for HIV services, and supporting clients in navigating the health system.
NATIONAL ENVIRONMENT
The CoH approach of taking services closer to the population is in line with the current President of Zambia’s push to bring services closer to citizens. No specific policy changes are needed to scale the intervention. This intervention supports national governance and leadership of HIV programs by providing access to HIV services, for citizens who face socio-economic and other barriers to accessing care. The CoH model has been adopted by the MoH and the President has launched the scaling up of this model to all markets and bus stops having launched the initiative on 2 April 27, 2019. The model has since been replicated and scaled up in select districts in Monze (five) and Livingstone (three). CoH has also oriented two provincial health teams from Southern and Western Provinces and another PEPFAR implementing partner, which has since opened its own community posts.

SCALABILITY
The community post model began with five sites, and has since expanded to 21 sites in Lusaka and eight sites in other provinces, including rural Zambia. One challenge faced thus far is the ability to train and mentor staff in other parts of the country who can replicate this model with fidelity. There is also the emerging challenge of silent transfers, which were discovered while investigating the high testing yields from the community posts. Viral load testing of a small sample of newly diagnosed positives at some of the community posts found that greater than 30 percent were already virally suppressed, indicating that they were likely already on treatment elsewhere. As differentiated service delivery (DSD) models are scaled up to help decongest health facilities, while strengthening patient transfer processes at facility-level, this should significantly reduce the impact of silent transfers. The CoH Executive Director has been a passionate advocate for scaling up this model to reach people who may be missed by current efforts, due to their limited access to health facilities.

MANAGEMENT & OVERSIGHT
PEPFAR TEAM INVOLVEMENT:
The PEPFAR country team became aware of the success of the CoH community model over the last two quarters of FY18 when it became apparent that CoH was exceeding its testing and treatment targets by more than any other partner. The team interrogated the data and conducted site visits to further investigate the results, which made clear that this was a successful solution to the challenge of case identification and scaling up of treatment in a province with high levels of treatment coverage.

IMPLEMENTING PARTNER:
CoH is a sub-grantee to the prime implementing partner and has since become the community-based partner to CRS supporting all the districts where CRS is implementing. CRS supported the planning and implementation of the community post model by utilizing their COP funding to support the pilot and scale up of the innovation to include
hiring staff, purchasing equipment and supplies, and ensuring support and mentoring from the affiliated health facility. Their approach for ensuring oversight was to align each community post with a parent health facility which provides oversight, monitoring and evaluation, and logistics and pharmacy support to each affiliated community post.

There are also important elements of CoH staff management emphasized by site leadership, including:

1. Hiring of staff for community outposts:
   a. Harness the social infrastructure of the community: >90 percent are from faith congregations inside the hotspots, and are leaders known and trusted within and beyond the faith congregation, into the broader community hotspot setting.
   b. Hiring for compassion as the top motivation is an essential criteria; motivation of the hired staff must be to “help care for my community.”

2. Support – the Executive Director (ED) and his senior management team (clinical, logistics, SI, and HTS) meets daily in the morning before work with all staff from each community post site to review targets and give them encouragement for the day. At end of the day, every community post reports back via group messaging to the ED on how their day went. The ED provides encouragement for success and assists with addressing challenges as needed.

3. Celebration – Quarterly celebration events, non-monetary in nature, hosted by ED for all community post staff, to celebrate progress toward helping their community build hope and life.

4. Social screening as precursor to risk-factor screening, for targeted HIV testing. This is due to stigma associated with many of the risk factors in our common clinical screening tools, community post staff (pastors, CHWs, and expert clients) who have social relationships with their communities use social markers to guide further assessment of HIV risk-factor based screening. Known risk factors for HIV include marital problems, participation in healing services, and recent family death.

5. CoH has recognized the immense value and contribution CHWs bring to the HIV treatment continuum. The amount of time, persuasive skills, and tact required for index testing elicitation, contact tracing, and counseling and testing is especially high. The sustained, consistent testing performance of CoH is a testimony to the skill level and importance of CoH CHWs. CoH CHWs and all the other CHWs working from community posts that CoH has opened for its facility partners and IPs are paid bi-weekly stipends of $65. The bi-weekly payments have proved to be a source of motivation as the CHWs look forward to receiving their stipend while attempting to meet their weekly target of one newly-identified PLHIV per day for each CHW. Along with this payment the ART initiator (team leader), counsellor, data associate and drivers working from the community posts are also paid daily lunch stipends of $5 (distributed bi-weekly) in addition to their monthly salaries. It is important to note that most CHWs working in Zambian government and other facilities are paid between $35 and $50 monthly and normally work only four hours per day.
MONITORING:
After opening the initial five community posts, the ED has utilized the experienced cadre of the ART initiator (clinical officer), counselor, CHWs, and expert clients to open new community posts. Daily, on-site mentorship is provided to a new team taking over the added community post by an experienced team for a minimum of 14 days. The orientation of the new team to run the added community post begins with a one-week orientation at the main facility that includes the following:

1. Orientation to the shared CoH vision of RECIPE (Responsibility, Empathy, Compassion, Integrity, Passion, Ethics);
2. Clinical, lab, pharmacy, logistical, M&E and SI training; and
3. Visits to one or two existing community posts before deploying to the new community post.

Once a new community post is opened, the CoH HQ team (now 15 staff) perform unannounced spot checks to ascertain fidelity, quality and enhance outcome attainment.

COMMUNICATIONS AND FEED-BACK LOOPS:
Daily morning pep talks by team leaders and the daily performance updates via mobile technology have proven to be a critical component of the success of this model. The frequency of communication was determined by the need to ensure that the central team at CoH was kept abreast of the performance of their teams at community posts.

BUDGET

COST OF INNOVATIVE SOLUTION:
The costs of this model have been kept at a reasonable level by applying lessons learned from previously offered mobile services in some of these areas. The community post model is not cost-intensive as it leverages community resources through engagement with community leadership, as described earlier. The model also has a small footprint (generally one or two small rooms in a market or bus stop) with a small contingent of six staff as described earlier. Commodities for the community post are provided through the parent health facility therefore eliminating the need for additional procurement mechanisms.

The approximate budget for each community post is listed below:

- Two-to-three visits for strategic environmental scan of communities for community post site selection (fuel and other transportation costs, about $30 each trip)
- Two-to-three meetings with stakeholders, community leaders, and health workers ($25 each meeting)
- Select location of community post with input from community leaders and local stakeholders
- Market and facility contribution (rental) for Community Posts ($80 monthly)
- HRH hiring
  - one clinical officer and/or nurse prescribers ($1,100 monthly salary)
  - one lay counsellor ($500 monthly salary)
  - four community health workers ($150 monthly stipend each)
- Community post site renovation ($500)
- Fuel ($500 monthly)
- Furniture and medical supply costs for initial setup, including tables, chairs, benches, BP machines, scales (adult & pediatric), screens, stethoscopes, thermometers, curtains, consumables for 12 months ($2,000)
- Support for HTS and retention outreach activities, including T-shirts, banners, “I know my status” pins, backpacks, umbrellas, bicycles, and boots ($750 annual)
- Recurrent costs for HTS and retention outreach activities, including transport refunds, fuel, community sensitization, lunch for staff for each HTS point ($1,200 annual)
- Timers for HTS ($15 each)
- HTS SOPs: Job aids, Policy, Registers and other printed material ($130 annual)
- Mobile hot spot testing pack, including standard testing supplies ($400)

**EFFICIENCY MEASURES:**
One challenge that was identified mid-way through implementation was the management of patient records on paper, requiring that records be stored at the community posts, which have limited space given their non-traditional locations. A decision was made to provide the community posts with the national electronic health record system (SmartCare) on laptops, to improve patient record management and facilitate electronic synchronizing of patient records with the parent health facility.

Discussions are on-going with the implementing partner to identify areas for additional cost efficiencies that can further reduce costs which are already minimal compared to health facility costs.